=> file hcaplus COST IN U.S. DOLLARS SINCE FILE TOTAL. ENTRY SESSION FILL ESTIMATED COST 0.84 0.84

FILE 'HCAPLUS' ENTERED AT 09:08:26 ON 11 MAR 2008 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

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FILE COVERS 1907 - 11 Mar 2008 VOL 148 ISS 11 FILE LAST UPDATED: 10 Mar 2008 (20080310/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s neotintima or restenosis or stent

0 NEOTINTIMA 9253 RESTENOSIS

5656 STENT

13099 NEOTINTIMA OR RESTENOSIS OR STENT

=> s (PPAR or (peroxisome proliferator-activated receptor))

10685 PPAR

20400 PEROXISOME

13861 PROLIFERATOR

551870 ACTIVATED

742262 RECEPTOR 8211 PEROXISOME PROLIFERATOR-ACTIVATED RECEPTOR

(PEROXISOME (W) PROLIFERATOR (W) ACTIVATED (W) RECEPTOR) 12209 (PPAR OR (PEROXISOME PROLIFERATOR-ACTIVATED RECEPTOR))

=> s phosphate or monoacylglycerol or diacylglycerol or pyrophosphate or

glycerophosphate

591159 PHOSPHATE

992 MONOACYLGLYCEROL

11173 DIACYLGLYCEROL

41912 PYROPHOSPHATE

9101 GLYCEROPHOSPHATE

632628 PHOSPHATE OR MONOACYLGLYCEROL OR DIACYLGLYCEROL OR PYROPHOSPHATE OR GLYCEROPHOSPHATE

=> s 11 and 12

T. 4 100 L1 AND L2 => s 11 and 12 and 13

L5 1 L1 AND L2 AND L3

=> s 14 and (PY<2004 or AY<2004 or PRY<2004)

23979567 PY<2004

4765121 AY<2004

4243738 PRY<2004

L6 56 L4 AND (PY<2004 OR AY<2004 OR PRY<2004)

=> s 15 and (PY<2004 or AY<2004 or PRY<2004)

23979567 PY<2004

4765121 AY<2004

4243738 PRY<2004

L7 0 L5 AND (PY<2004 OR AY<2004 OR PRY<2004)

=> file stnguide

COST IN U.S. DOLLARS SINCE FILE ENTRY

FULL ESTIMATED COST 2.69

TOTAL

3.53

SESSION

FILE 'STNGUIDE' ENTERED AT 09:08:37 ON 11 MAR 2008 USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

FILE CONTAINS CURRENT INFORMATION.
LAST RELOADED: Mar 7, 2008 (20080307/UP).

EAST REBOADED. MAI /, 2000 (2000030//01)

=> d 15 ti abs bib

YOU HAVE REQUESTED DATA FROM FILE 'HCAPLUS' - CONTINUE? (Y) /N:y

- L5 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2008 ACS on STN
- TI Preparation of indole compounds having CRTH2 antagonist activity for treating allergic diseases, asthma, and inflammatory conditions
- GI

- Compds. of general formula I (wherein R is Ph optionally substituted with AB one or more halo substituents) and their pharmaceutically acceptable salts, hydrates, solvates, complexes or prodrugs are antagonists at the CRTH2 receptor and are useful in the treatment of conditions mediated by PGD2 or other agonists binding to CRTH2. These include allergic diseases, asthmatic conditions and inflammatory diseases. A process for preparing I was addnl. claimed. Example compound II was prepared by reacting 2-(phenvlsulfonvl)benzaldehvde with 2-(5-fluoro-2-methvl-1H-indol-1-
- vl)acetic acid and saponification of the resulting ester. In an assav measuring

inhibition of 13,14-dihydro-15-keto-prostaglandin D2 induced blood eosinophilia in rats, II had an ED50 of 0.0025 µg/mL.

AN 2008:123834 HCAPLUS <<LOGINID::20080311>>

DN 148:183423

TI Preparation of indole compounds having CRTH2 antagonist activity for treating allergic diseases, asthma, and inflammatory conditions

TN Armer, Richard Edward; Wynne, Graham Michael

PA Oxagen Limited, UK SO PCT Int. Appl., 68pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PAT	TENT :	NO.			KIN	D	DATE		- 2	APPL	ICAT:	ION I	.OV		D.	ATE	
							_											
PI	WO	2008	0125	11		A1		2008	0131	1	WO 2	007-0	GB27	61		2	0070	720
		W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BH,	BR,	BW,	BY,	BZ,	CA,
			CH,	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DO,	DZ,	EC,	EE,	EG,	ES,	FI,
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			MG,	MK,	MN,	MW,	MX,	MY,	MZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PG,	PH,	PL,
			PT,	RO,	RS,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	SV,	SY,	ΤJ,	TM,	TN,
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			IS,	IT,	LT,	LU,	LV,	MC,	MT,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,
			ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG,	BW,
			GH,	GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,
			BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM									
PRAT	GB	2006	-146	n R		Δ		2006	1722									

PRAI GB 2006-14608 GB 2006-24176 20061204

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> file hcaplus COST IN U.S. DOLLARS SINCE FILE TOTAL. ENTRY SESSION FULL ESTIMATED COST 0.24 9.43 DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE TOTAL ENTRY SESSION CA SUBSCRIBER PRICE -0.80 0.00

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FILE COVERS 1907 - 11 Mar 2008 VOL 148 ISS 11 FILE LAST UPDATED: 10 Mar 2008 (20080310/ED)

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This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s neointima or restenosis or stent

1938 NEOINTIMA

9253 RESTENOSIS 5656 STENT

L8 14301 NEOINTIMA OR RESTENOSIS OR STENT

=> s (PPAR or (peroxisome proliferator-activated receptor))(4a)(inhibi? or block or suppress)

10685 PPAR

20400 PEROXISOME

13861 PROLIFERATOR

551870 ACTIVATED 742262 RECEPTOR

42262 RECEPTOR

8211 PEROXISOME PROLIFERATOR-ACTIVATED RECEPTOR

(PEROXISOME (W) PROLIFERATOR (W) ACTIVATED (W) RECEPTOR)

2016640 INHIBI?

264158 BLOCK

64386 SUPPRESS

L9 1527 (PPAR OR (PEROXISOME PROLIFERATOR-ACTIVATED RECEPTOR)) (4A) (INHIB I? OR BLOCK OR SUPPRESS)

=> s 18 and 19

L10 29 L8 AND L9

=> s 110 and (PY<2004 or AY<2004 or PRY<2004)

23979567 PY<2004

4765121 AY<2004 4243738 PRY<2004

.11 19 L10 AND (PY<2004 OR AY<2004 OR PRY<2004)

=> file stnguide

COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION 12.12 FULL ESTIMATED COST 2.69 DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE TOTAL ENTRY SESSION CA SUBSCRIBER PRICE 0.00 -0.80 FILE 'STNGUIDE' ENTERED AT 09:11:04 ON 11 MAR 2008 USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

FILE CONTAINS CURRENT INFORMATION.

LAST RELOADED: Mar 7, 2008 (20080307/UP).

=> d 111 1-19 ti abs bib

YOU HAVE REQUESTED DATA FROM FILE 'HCAPLUS' - CONTINUE? (Y) /N:v

- L11 ANSWER 1 OF 19 HCAPLUS COPYRIGHT 2008 ACS on STN
- TI Lysophosphatidic acid analogs and inhibition of neointima formation
- The phospholipid growth factor lysophosphatidic acids (LPAs) containing AR unsatd. fatty acids (18:1, 18:2 and 20:4) and fatty alcs. containing hydrocarbon chains with more than 4 carbons were capable of inducing a rapid formation of neointima, an initial step in the development of atherosclerotic plaque. LPAs with saturated fatty acids did not induce neointima formation. A Peroxisome Proliferator-Activated Receptors gamma (PPARy)-specific agonist Rosiglitasone also induced a profound formation of neointima. GW9662, a selective and irreversible antagonist of PPARy, abolished LPA- and Rosiglitazone-induced neointima formation, indicating that LPA-induced neointima formation requires the activation of PPARy. These data suggest that LPA analogs that bind to but do not activate downstream signaling of PPARy or antagonists of PPAR.gamma. that inhibit PPAR.gamma. signaling would be useful in the prevention and/or treatment of neointima formation and atherosclerosis.
- AN 2004:857161 HCAPLUS <<LOGINID::20080311>>
- DN 141:343506
- TI Lysophosphatidic acid analogs and inhibition of neointima formation
- IN Tigyi, Gabor; Baker, Daniel L.; Zhang, Chunxiang PA USA
- SO U.S. Pat. Appl. Publ., 23 pp.
- CODEN: USXXCO
- DT Patent
- LA English
- FAN.CNT 1

E LILY .	CIVI	1																	
		TENT :				KIN	D	DATE			APPL					-	ATE		
							_												
PΙ		2004				A1		2004	1014		US 2						0040		
	AU	2004	2294	67		A1		2004	1028		AU 2	004-	2294	67		2	0040	409	<
	AU	2004	2294	67		B2		2007	0125										
	CA	2521	189			A1		2004	1028		CA 2	004-	2521	189		2	0040	409	<
	WO	2004	0914	96		A2		2004	1028		WO 2	004-	US11	016		2	0040	409	<
	WO	2004	0914	96		A3		2005	0324										
		W:	AE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,	
			CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,	
			GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KZ,	LC,	
			LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,	
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			TJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW	
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			BY,	KG,	KZ,	MD,	RU,	TJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	
			ES,	FI,	FR.	GB,	GR,	HU,	IE,	IT,	LU,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	
			SK,	TR,	BF,	BJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	

TD, TG EP 1613298 A2 20060111 EP 2004-759365 20040409 <--R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR T JP 2006-509874 JP 2007525449 20070906 20040409 <--PRAI US 2003-462274P P 20030411 <--WO 2004-US11016 W 20040409

L11 ANSWER 2 OF 19 HCAPLUS COPYRIGHT 2008 ACS on STN

TI PPARa-selective chromane and chromene compounds for the treatment of dyslipidemia and other lipid disorders, and preparation thereof GI

A class of chromane and chromene compds. I [R1, R2, R4 = (un)substituted C1-3 alkyl; R3, R5, R7 = H, (un)substituted C1-3 alkyl; R6 = H, C1, Me, CF3; A, B = H, Cl, F, Me, CF3; X, Y = 0, S; n = 2, 3; dashed line = optional double bond], and pharmaceutically acceptable salts thereof, are useful as therapeutic compds., particularly in the treatment and control of hyperlipidemia, hypercholesterolemia, dyslipidemia, and other lipid disorders, and in delaying the onset of or reducing the risk of conditions and sequelae that are associated with these diseases, such as atherosclerosis. Compound preparation is included.

AN 2004:100986 HCAPLUS <<LOGINID::20080311>>

DN 140:157460

ΤI PPARa-selective chromane and chromene compounds for the treatment of dyslipidemia and other lipid disorders, and preparation thereof IN Desai, Ranjit C.; Sahoo, Soumya

PA

Merck & Co., Inc., USA SO PCT Int. Appl., 57 pp.

CODEN: PIXXD2

Patent

T.A English

FAN. CNT 1

L'ALV.	PATENT NO.					KIN		DATE				T 0 3 M	ION I	170			ATE		
	PAIR	SNI	NO.			KIN	D	DAIE			APPL.	ICAI	TON	NO.		D	AIE		
							-												
PI	WO 2	2004	0109	92		A1		2004	0205		WO 2	003-	US23-	499		2	0030	725 <	
		W:	ΑE,	AG,	AL,	AM,	AT,	ΑU,	AZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,	
			CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	
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			LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NI,	NO,	NZ,	OM,	PG,	
			PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	TJ,	TM,	TN,	TR,	
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	CA 2	2493	913			A1		2004	0205		CA 21	003-	2493	913		21	0.030	725 <	

		2003 1539		11		A1 A1			0216 0615	F E				11 47			0030		
		R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,	
			IE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR,	BG,	CZ,	EE,	HU,	SK		
	JP	2005	5381	09		T	2	2005	1215	Ü	TP 2	004-	5249:	24		2	0030	725	<
	US	2006	0894	04		A1	2	2006	0427	Ţ	JS 2	005-	5226	46		2	0050	926	<
	US	7297	715			B2	2	2007	1120										
PRAI	US	2002	-399	518P		P	2	2002	0730	<	-								
	WO	2003	-US2	3499		W	2	2003	0725	<									
OS	MAE	RPAT	140:	1574	50														

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L11 ANSWER 3 OF 19 HCAPLUS COPYRIGHT 2008 ACS on STN
- ΤТ Composition based on substituted 1,3-diphenylprop-en-1-one derivatives, preparation and use as PPARα agonists, antioxidants as well as antiinflammatory agents
- \* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY AVAILABLE VIA OFFLINE PRINT \*
- Title compds. I [wherein X1 = halo, R1, G1R1; X2 = H, thionitroso, OH, alkylcarbonyloxy, alkyloxy, SH, alkylthio, alkylcarbonylthio or X2 = 0 or S that forms a 2-phenyl-4H-1-benzopyran-4-one with the carbon-3 of the propene chain; X3 = R3, G3R3; X4 = halo, thionitroso, R4, G4R4; X5 = R5, G5R5; X6 = O, NH and derivs.; R1, R3, R4, R5 = independently H, (un) substituted alkyl; G1, G3, G4, G5 = independently O or S; with at least one of X1, X3, X4, or X5 of formula GR and one of the R1, R3, R4, or R5 is a substituted radical, and that radical form a cycle, or is associated with a group G; their optical and geometrical isomers, racemates, tautomers, salts, hydrates and mixts.; with the exclusion of certain compds.] were prepared as peroxisome proliferator-activated receptors-α (PPARα) agonists and as antioxidants for treating cerebral ischemia and related diseases. For example, II was prepared by mixed-Aldol condensation of ketone III with 4-hydroxy-3,5ditertbutylbenzaldehyde in the presence of ethanol/HCl. In an antioxidant test, selected I (10-3 M) diminished the formation of oxidation product of LDL by AAPH by 33%. Selected I were PPARa agonists, showing induced luciferase activity via PPARa/Gal4 transactivation with a factor of induction ranging from 10 to 60, 5-50 and 3-35 at 100 µM, 30 µM, and 10 µM resp. I and their compns. are useful for treating cardiovascular diseases, syndrome X, restenosis, diabetes, obesity, hypertension, inflammatory diseases, cancers or neoplasms (benign or malignant tumors), neurodegenerative diseases, dermatol, and the disorders related to the oxydative stress, for preventing and treating aging, and in particular cutaneous aging.
- AN 2004:19750 HCAPLUS <<LOGINID::20080311>>
- DN 140:76896
- ΤI Composition based on substituted 1,3-diphenylprop-en-1-one derivatives, preparation and use as PPARa agonists, antioxidants as well as antiinflammatory agents
- IN Najib, Jamila; Caumont Bertrand, Karine
- Genfit S.A., Fr. PA
- SO Fr. Demande, 66 pp.
- CODEN: FRXXBL Patent
- LA. French FAN.CNT 1

		ENT I				KIN		DATE			APPL	ICAT	ION	NO.			ATE		
PI	FR	2841	784			A1		2004 2007			FR 2	002-	8570				0020	708 <	<
						A1						000	0.400				0000	700	
		2490						2004										708 <	
		2004				A2		2004			NO 2	003-	FR21:	28		2	2030	708 <	<
	WO	2004						2004				_							
		W:						ΑU,											
								DK,											
								IN,											
								MD,											
								RU,								ТJ,	TM,	TN,	
								US,											
		RW:						MZ,											
								TM,											
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			BF,	ΒJ,	CF,	CG,		CM,											
	AU	2003	2646	99		A1												708 <	
	EP	1519	908			A2		2005	0406		EP 2	003-	7627	50		2	0030	708 ∢	<
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			IE,	SI,	LT,	LV,		RO,											
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	CN	1688 2005 3645	532			A		2005	1026		CN 2	003-	8163	51		2	0030	708 <	<
	JP	2005	5323	86		T		2005	1027		JP 2	004-	5188	91		2	0030	708 -	<
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	NZ	5380	52			A		2007	0928		NZ 2	003-	5380	52		2	0030	708 <	<
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	MX	2005	PAOO	425		A		2005	0722									107 <	
		2005				A1												404 <	
PRAI		2002				A		2002											
	WO	2003	-FR2	128		W		2003			_								
os		RPAT																	

RE.CNT 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L11 ANSWER 4 OF 19 HCAPLUS COPYRIGHT 2008 ACS on STN
- TI PPARy ligands induce prostaglandin production in vascular smooth muscle cells: indomethacin acts as a peroxisome proliferator-activated receptor-y antagonist
- AB Peroxisome proliferator-activated receptor (PPAR) and inducible cyclooxygenase-2 (COX-2) are expressed in atherosclerotic lesions. particularly in the intimal monocytic and vascular smooth muscle cells. We have therefore studied the interaction between PPARy and inducible cyclo-oxygenase (COX-2) in rat aortic vascular smooth muscle cells (RASMC)s. The synthetic PPARy ligand rosiglitazone induced prostaglandin (PG) release from RASMCs, including that of PGD2, the precursor of the putative endogenous PPARy ligand 15-deoxy-Δ12,14-prostaglandin J2. Moreover, rosiglitazone both synergized with IL-1β to further induce prostaglandin release and affected the expression of phospholipase A2 and COX-2. Rosiglitazone-induced prostaglandin release was inhibited by the PPAR.gamma. partial agonist GW0072 and the PPARy antagonist GW9662. Rosiglitazone also induced RASMC apoptosis, an effect not explained as an autocrine effect of the induced-prostanoids, but on arachidonic acid release, as cell death was unaffected by either the nonselective COX inhibitor piroxicam or the selective COX-2 inhibitor DFP, but by inhibitors of either secretory or cytosolic phospholipase A2. In contrast, indomethacin, an alternative inhibitor of cyclooxygenase activity, inhibited both rosiglitazone-induced cell death, and

rosiglitazone-induced PPAR reporter gene activation.

- 2003:826151 HCAPLUS <<LOGINID::20080311>>
- DN 139:345691

AN

- TI PPARy ligands induce prostaglandin production in vascular smooth muscle cells: indomethacin acts as a peroxisome proliferator-activated receptor-y antagonist
- AU Bishop-Bailey, David; Warner, Timothy D.
- CS Dep. of Cardiac, Vascular and Inflammation Res., William Harvey Res. Inst., Barts and the London, Queen Mary's Sch. of Med. and Dentistry, London, ECIM 68Q, UK
- SO FASEB Journal (2003), 17(13), 1925-1927, 10.1096/fj.02-1075fje CODEN: FAJOEC; ISSN: 0892-6638
- PB Federation of American Societies for Experimental Biology
  DT Journal
- DT Journal LA English
- RE.CNT 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L11 ANSWER 5 OF 19 HCAPLUS COPYRIGHT 2008 ACS on STN
- TI Use of PPAR alpha agonists for the treatment of vascular and renal diseases
- AB Activation of peroxisome proliferator activated receptor alpha (PPARa) by administration of therapeutic amts. of a PPAR  $\alpha$  agonist, WY-14643, inhibits the proliferation of PAR vacular smooth muscle cells, hepatoma cells and human renal proximal tubule cells. WY-14643 may be applicable as a medicament for the treatment of proliferative vascular disease (atherosclerosis, hypertension), revascularization-induced injury (restenosis) and chronic renal failure.
- AN 2003:737571 HCAPLUS <<LOGINID::20080311>>
- DN 139:255357
- TI Use of PPAR alpha agonists for the treatment of vascular and renal diseases
- IN Zahradka, Peter; Taylor, Carla
- PA Can.
- SO PCT Int. Appl., 33 pp. CODEN: PIXXD2
- DT Patent
- LA English

FAN.	CNT 1																	
	PATE	NT I	.OV			KIN	D	DATE			APPL	ICAT	ION	NO.		DA	ATE	
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PI	WO 2	0030	0759	11		A1		2003	0918		WO 2	003-	CA33	5		20	0030	311 <
		W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,
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			GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KZ,	LC,	LK,	LR,
			LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NI,	NO,	NZ,	OM,
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	CA 2	4813	371			A1		2003	0918		CA 2	003-	2481	371				311 <
	AU 2	0032	2082	38		A1		2003	0922		AU 2	003-	2082	38		20	0030	311 <
	US 2	0060	0524	57		A1		2006	0309		US 2	005-	5074	95		20	0050	817 <
PRAI	US 2	002	-362	243P		P		2002	0311	<-	-							
	WO 2	003-	-CA3	35		W		2003	0311	<-	-							

RE.CNT 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L11 ANSWER 6 OF 19 HCAPLUS COPYRIGHT 2008 ACS on STN
- TI Inhibitory Activity of Clinical Thiazolidinedione Peroxisome Proliferator Activating Receptor-Y Ligands Toward Internal Mammary Artery, Radial Artery, and Saphenous Vein Smooth Muscle Cell Proliferation
- AR Background- The proliferation of vascular smooth muscle cells (VSMCs) is a known response to arterial injury that is an important part of the process of restenosis and atherosclerosis. People with diabetes have an increased risk of cardiovascular disease resulting from accelerated coronary atherosclerosis. The newest drugs for Type 2 diabetes are thiazolidinediones, which are insulin-sensitizing peroxisome proliferator activating receptor-v (PPARv) ligands. We investigated the antiproliferative effects of troglitazone, rosiglitazone, and pioglitazone on VSMCs derived from the three vascular beds used for coronary artery bypass grafting: the internal mammary and radial artery and saphenous veins. Methods and Results- The three vessels yielded proliferating cells of slightly differing morphol. Inhibition of cell proliferation was assessed by cell counting and cell cycle studies by Western blotting for phosphorylated retinoblastoma protein. All three thiazolidinediones showed inhibitory potency toward cell proliferation with a potency troglitazone>rosiglitazone≈pioglitazone, and this potency profile was maintained toward the growth factor and insulin-stimulated phosphorylation of the retinoblastoma protein, which controls cell cycle progression. Conclusion- The inhibitory potency of clin. thiazolidinediones toward different vascular sources is dependent on the individual thiazolidinedione and very little on the vascular source.
- AN 2003:373269 HCAPLUS <<LOGINID::20080311>>
- DN 140:12803
- TI Inhibitory Activity of Clinical Thiazolidinedione Peroxisome Proliferator Activating Receptor—y Ligands Toward Internal Mammary Artery, Radial Artery, and Saphenous Vein Smooth Muscle Cell Proliferation
- AU de Dios, Stephanie T.; Bruemmer, Dennis; Dilley, Rodney J.; Ivey, Melanie E.; Jennings, Garry L. R.; Law, Ronald E.; Little, Peter J.
- CS Baker Heart Research Institute, Monash University, Melbourne, Australia SO Circulation (2003), 107(20), 2548-2550
- CODEN: CIRCAZ; ISSN: 0009-7322 PB Lippincott Williams & Wilkins
- DT Journal
- LA English
- RE.CNT 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L11 ANSWER 7 OF 19 HCAPLUS COPYRIGHT 2008 ACS on STN
- TI PPAR.alpha. inhibits TGF- $\beta$  induced  $\beta$ 5
  - integrin transcription in vascular smooth muscle cells by interacting with  ${\sf Smad4}$
- AB Integrins play an important role in vascular smooth muscle cell (VSMC) migration, a crucial event in the development of restenosis and atherosclerosis. Transforming growth factor- $\beta$  (TGF- $\beta$ ) is highly expressed in restenotic and atherosclerotic lesions, and known to induce integrin expression. Peroxisome proliferator-activated receptor a (PPARa), a member of the nuclear receptor superfamily, regulates gene expression in a variety of vascular cells. The authors investigated the effects of PPAR $\alpha$  ligands on TGF- $\beta$ -induced  $\beta3$  and β5 integrin expression and potential interaction between PPARα and TGF-β signaling. PPARα ligands WY-14643 (100 μM) and 5,8,11,14-eicosatetranoic acid (ETYA, 50 µM) inhibited TGF- $\beta$ -induced  $\beta$ 5 integrin protein expression by 72±6.8% and 73±7.1%, resp. (both P<0.05). TGF- $\beta$ -stimulated  $\beta$ 3 integrin expression was not affected by PPARα ligands. Both PPARα ligands also suppressed TGF-β-induced β5 integrin mRNA levels. PPAR.alpha. ligands inhibited TGF-β-inducible

transcription of  $\beta b$  integrin by an interaction with a TGF- $\beta$  response element between nucleotides -63 and -44, which contains a Spl/Sp3 transcription factor binding site. Nuclear complexes binding to the TGF- $\beta$  response region contained Spl/Sp3 and TGF- $\beta$ -regulated Smad 2, 3, and 4 transcription factors. TGF- $\beta$ -stimulated Spl/Smad4 nuclear complex formation was inhibited by WY-14643 and ETYA with a parallel induction of PPRARV. Smad4 interactions. However, in vitro pull-down expts. falled to demonstrate direct binding between PPRARV. Ingand4. Both PPRARV ligands blocked PDGF-directed migration of TGF- $\beta$ -pretreated VSMCs, a process mediated, in part, by  $\beta b$  integrins. The present study demonstrates that PPRAR  $\alpha$  activators inhibit TGF- $\beta$ -induced  $\beta b$  integrin transcription in VSMCs through a novel indirect interaction between ligand-activated PPRAR $\alpha$  and the TGF- $\beta$ -regulated Smad4 transcription factors.

AN 2002:877961 HCAPLUS <<LOGINID::20080311>>

DN 138:199151

TI PPAR.alpha. inhibits TGF- $\beta$  induced  $\beta$ 5 integrin transcription in vascular smooth muscle cells by interacting with Smad4

AU Kintscher, Ulrich; Lyon, Christopher; Wakino, Shu; Bruemmer, Dennis; Feng, Xu; Goetze, Stephan; Graf, Kristof; Moustakas, Aristidis; Staels, Bart; Fleck, Eckart; Hsueh, Willa A.; Law, Ronald E.

CS School of Medicine, Division of Endocrinology, , Diabetes and Hypertension, Department of Medicine, University of California, Los Angeles, CA, USA

SO Circulation Research (2002), 91(11), e35-e44

CODEN: CIRUAL; ISSN: 0009-7330

PB Lippincott Williams & Wilkins

DT Journal LA English

RE.CNT 43 THERE ARE 43 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 8 OF 19 HCAPLUS COPYRIGHT 2008 ACS on STN

TI Acyl sulfamides for treatment of obesity, diabetes and lipid disorders

AB A class of acyl sulfamides comprises compds. that are potent ligands for PPARy receptors and generally have antagonist or partial agonist activity. The compds. may be useful in the treatment, control or prevention of obesity, non-insulin dependent diabetes mellitus (NIDDM), hyperglycemia, dyslipidemia, hyperlipidemia, hypercholesterolemia, hypertriclyceridemia, atherosclerosis, vascular restenosis, inflammation, and other PPARy receptor-mediated diseases, disorders and conditions, alone or in combination with one or more other compds. Other compds. are selected from insulin sensitizers, insulin or insulin mimetics, sulfonvlureas, α-glucosidase inhibitors, cholesterol lowering agents, PPAR.delta. agonists, antiobesity compds., an ileal bile acid transporter inhibitor, and agents intended for use in inflammatory conditions such as aspirin, nonsteroidal anti-inflammatory drugs, glucocorticoids, azulfidine, and cyclooxygenase-2 selective inhibitors.

AN 2002:594636 HCAPLUS <<LOGINID::20080311>>

DN 137:135097

TI Acyl sulfamides for treatment of obesity, diabetes and lipid disorders

IN Jones, A. Brian; Acton, John J., III

PA Merck & Co., Inc., USA

SO PCT Int. Appl., 64 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

				DATE
PI	WO 2002060388 WO 2002060388	A2 20020808 A3 20030227	WO 2002-US3119	20020125 <
	W: AE, AG, AL, CO, CR, CU, GM, HR, HU, LT, LU, LV, PT, RO, RU,	AM, AT, AU, AZ, CZ, DE, DK, DM, ID, IL, IN, IS, MA, MD, MG, MK, SD, SE, SG, SI,	BA, BB, BG, BR, BY, BZ, DZ, EC, EE, ES, FI, GB, JP, KE, KG, KR, KZ, LC, MN, MW, MX, MZ, NO, NZ, SK, SL, TJ, TM, TN, TR,	GD, GE, GH, LK, LR, LS, OM, PH, PL,
	RW: GH, GM, KE, CY, DE, DK,	ES, FI, FR, GB, CG, CI, CM, GA,	SL, SZ, TZ, UG, ZM, ZW, GR, IE, IT, LU, MC, NL, GN, GO, GW, ML, MR, NE,	PT, SE, TR, SN, TD, TG
	CA 2434491 AU 2002240235 EP 1357908 R: AT, BE, CH,	A1 20020808 A1 20020812 A2 20031105 DE, DK, ES, FR,	CA 2002-2434491 AU 2002-240235 EP 2002-706128 GB, GR, IT, LI, LU, NL,	20020125 < 20020125 < 20020125 < SE, MC, PT,
PRAI	IE, SI, LT, JP 2004521119 US 2004073037 US 6852738 US 2001-264955P	T 20040715 A1 20040415 B2 20050208 P 20010130	EP 2002-706128 GB, GR, IT, LI, LU, NL, CY, AL, TR JP 2002-560584 US 2003-470483 <	20020125 < 20030729 <
os	WO 2002-US3119 MARPAT 137:135097	W 20020125	<	
L11 TI AB	MNSMER 9 OF 19 HCA Methods for treatin The present inventi treatment inflammat neurol., ophthalmic dysregulations. In conditions and dise an animal in need t comprising a pharma agonist which cross PPARy partial agoni	g inflammatory di on describes meth ory endocrine, de , neoplastic, pul: addition, method ases comprising t hereof a therapeu ceutically accept -activates PPARQ st, or a PPARY/RX	008 ACS on STN seases using PPAR agoni ods for the use of PPAR matol, cardiovascular monary diseases, and as s are provided for tree he step of administratic tic amount of pharmacol able carrier, and a PP or PPARS or both, or a R agonist, effective to pathol. inflammatory or	sts ligands in the immunol., e-related iting said g to a human or . compns. RY
AN DN TI IN	Pershadsingh, Harri	g inflammatory di	0311>> seases using PPAR agoni	sts
PA SO DT	USA PCT Int. Appl., 42 : CODEN: PIXXD2 Patent	pp.		
LA FAN.	English CNT 2 PATENT NO.	KIND DATE	APPLICATION NO.	DATE
	WO 2002013812 W: AU, CA, MX, RW: AT, BE, CH,	A1 20020221 NZ, US CY, DE, DK, ES,	WO 2001-US25668 FI, FR, GB, GR, IE, IT,	20010816 <
PRAI	PT, SE, TR AU 2001088271 US 2000-225907P US 2000-230509P WO 2001-US25668	A5 20020225 P 20000817 P 20000906 W 20010816	AU 2001-88271 < <	20010816 <

US 2000-239599P P 20000906 <-WO 2001-US2566 ARE 2 W 20010916 <-RE.ONT 2 THERE ARE 2 W CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L11 ANSWER 10 OF 19 HCAPLUS COPYRIGHT 2008 ACS on STN
- Peroxisome proliferator-activated
  - receptor γ inhibits transforming growth factor B-induced connective tissue growth factor expression in human aortic smooth muscle cells by interfering with Smad3
  - Activation of peroxisome proliferator-activated receptor  $\gamma$ (PPARy) after balloon injury significantly inhibits VSMC proliferation and neointima formation. However, the precise mechanisms of this inhibition have not been determined. The authors hypothesized that activation of PPARy in vascular injury could attenuate VSMC growth and matrix production during vascular lesion formation. Since connective tissue growth factor (CTGF) is a key factor regulating extracellular matrix production, abrogation of transforming growth factor β (TGF-β)-induced CTGF production by PPARy activation may be one of the mechanisms through which PPAR.gamma. agonists inhibit neointima formation after vascular injury. In this study, the authors demonstrate that the PPARy natural ligand (15-deoxyprostaglandin J2) and a synthetic ligand (GW7845) significantly inhibit TGF-β-induced CTGF production in a dose-dependent manner in In addition, suppression of CTGF mRNA expression is relieved by pretreatment with an antagonist of PPARy (GW9662), suggesting that the inhibition of CTGF expression is mediated by PPARy. To elucidate further the mol. mechanism by which PPAR.gamma. inhibits CTGF expression, an .apprx.2-kilobase pair CTGF promoter was cloned. The authors found that PPAR.gamma. activation inhibits  $TGF-\beta$ -induced CTGF promoter activity in a dose-dependent manner, and suppression of CTGF promoter activity by PPARy activation is completely rescued by overexpression of Smad3, but not by Smad4. Furthermore, PPARy phys. interacts with Smad3 but not Smad4 in vitro in glutathione S-transferase pull-down expts. Taken together, the data suggest that PPAR.gamma. inhibits TGF-β-induced CTGF expression in HASMCs by directly interfering with
- the Smad3 signaling pathway. 2001:908512 HCAPLUS <<LOGINID::20080311>> AN
- 136:198017 DN
- TΙ Peroxisome proliferator-activated
  - receptor y inhibits transforming growth factor β-induced connective tissue growth factor expression in human aortic smooth muscle cells by interfering with Smad3
- ΑU Fu, Mingui; Zhang, Jifeng; Zhu, Xiaojun; Myles, David E.; Willson, Timothy M.; Liu, Xuedong; Chen, Yuging E.
- Cardiovascular Research Institute, Morehouse School of Medicine, Atlanta, GA, 30310, USA
- Journal of Biological Chemistry (2001), 276(49), 45888-45894 CODEN: JBCHA3; ISSN: 0021-9258
- PR American Society for Biochemistry and Molecular Biology
- DT Journal

SO

- LA English
- RE.CNT 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L11 ANSWER 11 OF 19 HCAPLUS COPYRIGHT 2008 ACS on STN
- TΙ Peroxisome proliferator-activated

receptor-γ ligands inhibit nuclear but not cytosolic extracellular signal-regulated kinase/mitogen-activated protein kinase-regulated steps in vascular smooth muscle cell migration

Vascular smooth muscle cell (VSMC) migration involves adhesion, locomotion, and invasion regulated by various signaling mols., among which the extracellular signal-regulated kinase (ERK)/mitogen-activated protein kinases (MAPK) play a critical role. We have shown that the peroxisome

proliferator-activated receptor-γ (PPAR-γ) ligands

troglitazone and rosiglitazone inhibit VSMC migration downstream of ERK MAPK. The purpose of the current study was to more specifically determine which step(s) in VSMC migration are targeted by inhibition of the ERK MAPK pathway or activation of PPAR-y. VSMC adhesion was not affected by the ERK MAPK pathway inhibitor PD98059 or PPAR-y

ligands. Phosphorylation and activation of myosin light chain kinase (MLCK) play important roles in cell locomotion. Platelet-derived growth factor (PDGF)-induced MLCK phosphorylation (1.7-fold) was completely blocked by PD98059 at 30 µM (p < 0.05), but not by troglitazone or rosiglitazone. PDGF-directed migration (5.8-fold) was inhibited by PD98059 (-88% at 30 uM) and the MLCK inhibitor ML9 (0.1-1 uM, -84% at 1  $\mu$ M) (all p < 0.05). The transcription factor Ets-1 mediates matrix metalloproteinase induction required for tissue invasion by VSMC. PDGF (20 ng/mL) stimulated an Ets-1 protein expression (14-fold at 60 min) in VSMC, which was inhibited by PD98059 (-72% at 30 μM), troglitazone (-69% at 20  $\mu$ M), and rosiglitazone (-54% at 10  $\mu$ M) (all p < 0.05). Immunohistochem. of rat aortae 2 h after balloon injury showed a dramatic upregulation of Ets-1, which was markedly inhibited in animals that had received troglitazone treatment. In contrast, phosphorylated ERK MAPK was not affected by troglitazone. These data are consistent with PPAR-γ ligands exerting their anti-migratory effects downstream of ERK MAPK activation by blocking nuclear events, such as Ets-1 expression, required for cell invasion in response to arterial injury.

- AN 2001:887435 HCAPLUS <<LOGINID::20080311>>
- DN 136:161114
- TI Peroxisome proliferator-activated
  - receptor-y ligands inhibit nuclear but not cytosolic extracellular signal-regulated kinase/mitogen-activated protein kinase-regulated steps in vascular smooth muscle cell migration
- AU Goetze, Stephan; Kintscher, Ulrich; Kim, Sarah; Meehan, Woerner P.; Kaneshiro, Kristina; Collins, Alan R.; Fleck, Eckart; Hsueh, Willa A.; Law, Ronald E.
- CS Department of Medicine/Cardiology, Virchow Klinikum, Humboldt University Berlin and German Heart Institute Berlin, Berlin, 13353, Germany
- SO Journal of Cardiovascular Pharmacology (2001), 38(6), 909-921
- CODEN: JCPCDT; ISSN: 0160-2446
- PB Lippincott Williams & Wilkins DT Journal
- DT Journal LA English
- RE.CNT 44 THERE ARE 44 CITED REFERENCES AVAILABLE FOR THIS RECORD
  ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L11 ANSWER 12 OF 19 HCAPLUS COPYRIGHT 2008 ACS on STN
- TI Control of vascular cell proliferation and migration by PPAR- $\gamma$ : A new approach to the macrovascular complications of diabetes
- AB A review with 82 refs. Compared with nondiabetic subjects, type 2 diabetic individuals are at an increased risk for coronary artery disease and coronary restenosis after angioplasty or stenting. Increased proliferation and migration of vascular smooth muscle cells (VSMCs) contribute importantly to the formation of both atherosclerotic and restenotic lesions. Therefore, pharmaceutical interventions targeting proteins that regulate VSMC growth or movement are a promising new approach to treat diabetes-associated cardiovascular disease. Peroxisome proliferator-activated receptor-γ (PPAR-γ) is a member of the nuclear receptor superfamily that, when activated by thiazolidinedione (TZD) insulin sensitizers, regulates a host of target genes. All of the major cells in the vasculature express PPAR-γ, including endothelial cells, VSMCs, and monocytes/macrophages. PPAR- $\gamma$  is present in intimal macrophages and VSMCs in early human atheromas. In an animal model of vascular injury, PPAR-γ levels are substantially elevated in the neointima that forms after mech. injury of the

endothelium. Recent exptl. studies provide evidence that PPAR- $\gamma$  may function to protect the vasculature from injury. Cell culture studies have shown that TZD PPAR- $\gamma$  ligands inhibit both the proliferation and migration of VSMCs. These antiatherogenic activities of PPAR- $\gamma$  may also occur in vivo, because TZDs inhibit lesion formation in several animal models. PPAR- $\gamma$  ligands may also protect the vasculature indirectly by normalizing metabolic abnormalities of the diabetic milieu that increase cardiovascular risk. Activation of PPAR- $\gamma$ , newly defined in vascular cells, may be a useful approach to protect the vasculature in diabetes.

- AN 2001:136312 HCAPLUS <<LOGINID::20080311>>
- DN 134:235155
- TI Control of vascular cell proliferation and migration by PPAR-γ: A new approach to the macrovascular complications of diabetes
- AU Hsueh, Willa A.; Jackson, Simon; Law, Ronald E.
- CS Department of Medicine, the Endocrinology, Diabetes, and Hypertension Division, University of California School of Medicine, Los Angeles, CA, 90095-7073, USA
- SO Diabetes Care (2001), 24(2), 392-397
  - CODEN: DICAD2; ISSN: 0149-5992
- PB American Diabetes Association, Inc.
- DT Journal; General Review
- LA English
- RE.CNT 82 THERE ARE 82 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L11 ANSWER 13 OF 19 HCAPLUS COPYRIGHT 2008 ACS on STN
  - II Methods using PPAR.delta. inhibitors for treatment of vascular diseases, cancer, Alzheimer's disease, and inflammatory disorders, and drug screening methods
- AB A method of preventing or reducing foam cell development from macrophages, or removing foam cells, in a patient comprises administering an effective amount of an inhibitor of PPAR.delta. activity. A method of preventing or treating a vascular disease associated with plaque formation and/or thrombotic blockage of the blood vessels in a patient comprises administering to the patient an effective amount of an inhibitor of PPAR.delta. activity. Also disclosed are methods for the treatment of cancer, Alzheimer's disease, and inflammatory disorders.
- AN 2001:78255 HCAPLUS <<LOGINID::20080311>>
- DN 134:141771
- TI Methods using PPAR.delta. inhibitors for treatment of vascular diseases, cancer, Alzheimer's disease, and inflammatory disorders, and drug screening methods
- IN Palmer, Colin Neil Alexander; Vosper, Helen; Wolf, Charles Roland
- PA The University of Dundee, UK
- SO PCT Int. Appl., 52 pp.
- CODEN: PIXXD2 DT Patent
- LA English
- FAN.CNT 1

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                             20020409
                                       BR 2000-12661
                                                             20000719 <--
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                       A2
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                                        EP 2000-956238
    EP 1200114
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           IE, SI, LT, LV, FI, RO, MK, CY, AL
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                                        TR 2002-211
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    HU 2002001966
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    HU 2002001966
                      A3 20050128
    JP 2003505058
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    TR 200501763
                      T2 20050822 TR 2005-1763
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    IN 2001MN01670
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                            20050304
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    NO 2002000326
                      A
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                                     NO 2002-326
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                                       ZA 2002-542
                                                             20020122 <--
    MX 2002PA00880
                      A
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    AU 2004212557
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    IN 2008MN00046
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                                       IN 2008-MN46
                                                            20080108 <--
PRAI GB 1999-17405
                            19990723 <--
                       Α
    AU 2000-68259
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    WO 2000-EP6986
                            20000719 <--
                       W
    IN 2001-MN1670
                       A3
                            20011231 <--
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- L11 ANSWER 14 OF 19 HCAPLUS COPYRIGHT 2008 ACS on STN
- TI PPARs and atherosclerosis
- AB A review, with 48 refs. PPARs are key players in lipid and glucose metabolism, which have been implicated in metabolic diseases, such as dyslipidemia and diabetes, predisposing to atherosclerosis. Whereas PPARy promotes lipid storage via its effects on adipocyte differentiation and function, PPAR $\alpha$  stimulates the  $\beta$ -oxidative degradation of fatty acids. PPARa-deficient mice exhibit a prolonged response to inflammatory stimuli suggesting that PPARa could be a mediator of inflammatory control. Fibrates, synthetic PPARa ligands, decrease atherosclerotic lesion progression, even in the absence of atherogenic lipoprotein lowering suggesting a function of PPARs at the vascular wall. Therefore, the expression and function of PPARs in human vascular smooth muscle cells (SMC), macrophages and endothelial cells (EC) was analyzed. Whereas human aortic SMC and coronary EC express mainly PPARα, differentiated macrophages express both PPARα and PPARy. In SMC and EC PPAR.alpha. activators resp. inhibit interleukin (IL)1-induced IL-6 and prostaglandin (PG) production and thrombin-induced endothelin-1 production In differentiated macrophages, activation of PPARy results in apoptosis induction, as measured by the TUNEL assay and the appearance of the active proteolytic subunits of the cell death protease caspase-3. In all cell types PPARs act by neg. interfering with the NFKB and AP-1 signaling pathways. These data indicate a novel function for PPARs in cells of the vascular wall in modulating vasomotricity, inflammatory response and cell proliferation with likely consequences in atherosclerosis and
- restenosis.
  AN 2000:647715 HCAPLUS <<LOGINID::20080311>>
- DN 134:129171
- TI PPARs and atherosclerosis
- AU Torra, InEs Pineda; Fruchart, Jean-Charles; Staels, Bart
- No Torra, Imas Fineda, Frachart, Jean-Charles, Staels, Bart

  Sinserm U.325, Dep. d'AthErosclErose, Institut Pasteur de Lille, Lille,
  59019, Fr.
- 50 Lipoprotein Metabolism and Atherogenesis, [International Symposium on Lipoprotein Metabolism and Atherogenesis], Kyoto, Japan, Dec. 5-8, 1998 ( 2000), Meeting Date 1998, 88-95. Editor(s): Kita, Toru; Yokode, Masayuki. Publisher: Springer-Verlag Tokyo, Tokyo, Japan. CODEN: 69AI09

- DT Conference; General Review
- LA English
- RE.CNT 48 THERE ARE 48 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L11 ANSWER 15 OF 19 HCAPLUS COPYRIGHT 2008 ACS on STN
- II Peroxisome proliferator-activated receptor-γ ligands inhibit nitric oxide synthesis in vascular smooth muscle cells
- Peroxisome proliferator-activated receptor-y (PPARy) is a key player in glucose metabolism If PPARy ligands modulate nitric oxide (NO) synthesis in the vascular tissue, they may affect the process of plaque formation and postangioplasty restenosis. We investigated the effects of PPARy ligands on NO synthesis in vascular smooth muscle cells. Incubation of cultures with interleukin-1 $\beta$  (10 ng/mL) for 24 h caused a significant increase in the production of nitrite, a stable metabolite of NO, in cultured rat vascular smooth muscle cells. The PPARy agonists troglitazone and 15-deoxy-A12,14-prostaglandin J2 (15d-PG J2) dose-dependently inhibited nitrite production by interleukin-1β-stimulated vascular smooth muscle cells. Decreased interleukin-1β-induced nitrite production by the PPARy agonist was accompanied by decreased inducible NO synthase mRNA and protein accumulation. Interleukin-1β induced nuclear factor-KB activation in vascular smooth muscle cells, and both troglitazone and 15d-PG J2 markedly suppressed this nuclear factor-kB activation. PPAR.gamma. ligands inhibit NO synthesis in cytokine-stimulated vascular smooth muscle cells, suggesting that these agonists may act directly on the vascular smooth muscle and influence the process of atherosclerosis and restenosis
- AN 2000:444444 HCAPLUS <<LOGINID::20080311>>
- DN 133:305468
- TI Peroxisome proliferator-activated receptor-γ ligands inhibit nitric oxide synthesis in vascular smooth muscle cells
- AU Ikeda, Uichi; Shimpo, Masahisa; Murakami, Yoshiaki; Shimada, Kazuyuki
- CS Department of Cardiology, Jichi Medical School, Tochigi, 329-0498, Japan
- SO Hypertension (2000), 35(6), 1232-1236
- CODEN: HPRTDN; ISSN: 0194-911X PB Lippincott Williams & Wilkins
- DT Journal
- LA English
- RE.CNT 45 THERE ARE 45 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L11 ANSWER 16 OF 19 HCAPLUS COPYRIGHT 2008 ACS on STN
- TI Expression and function of PPAR $\gamma$  in rat and human vascular smooth muscle cells
- AB Peroxisome proliferator-activated receptor-y (PPARy) is activated by fatty acids, eicosanoids, and insulin-sensitizing thiazolidinediones (TZDs). The TZD troglitazone (TRO) inhibits vascular smooth muscle cell (VSMC) proliferation and migration in vitro and in post-injury intimal hyperplasia. Rat and human VSMCs expressed mRNA and nuclear PPARyl. Three PPARy ligands, the TZDs TRO and rosiglitazone and the prostanoid 15-deoxy-A12,14-prostaglandin J2 (15d-PGJ2), all inhibited VSMC proliferation and migration. PPARy was upregulated in rat neointima at 7 days and 14 days after balloon injury and was also present in early human atheroma and precursor lesions. Thus, pharmacol. activation of PPAR, gamma. expressed in VSMCs inhibits their proliferation and migration, potentially limiting restenosis and atherosclerosis. These receptors are

- upregulated during vascular injury.
- 2000:240919 HCAPLUS <<LOGINID::20080311>> AN
- DN 133:148479
- TT Expression and function of PPARy in rat and human vascular smooth muscle cells
- Law, Ronald E.; Goetze, Stephan; Xi, Xiao-Ping; Jackson, Simon; Kawano, AU Yasuko; Demer, Linda; Fishbein, Michael C.; Meehan, Woerner P.; Hsueh, Willa A.
- Department of Medicine, University of California at Los Angeles School of Medicine, Los Angeles, CA, 90095, USA
- Circulation (2000), 101(11), 1311-1318 CODEN: CIRCAZ; ISSN: 0009-7322
- PB Lippincott Williams & Wilkins
- DТ Journal
- LA English
- RE.CNT 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L11 ANSWER 17 OF 19 HCAPLUS COPYRIGHT 2008 ACS on STN
- ΤI PPAR.gamma.-ligands inhibit migration mediated by
- multiple chemoattractants in vascular smooth muscle cells
- AB The purpose of this study was to determine the effect of the peroxisome proliferator-activated receptor γ-(PPARγ) ligands troglitazone (TRO), rosiglitazone (RSG), and 15-deoxy-∆ prostaglandin J2 (15d-PGJ2) on vascular smooth muscle cell (VSMC) migration directed by multiple chemoattractants. Involvement of mitogen-activated protein kinase (MAPK) in migration also was examined, because TRO was previously shown to inhibit nuclear events stimulated by this pathway during mitogenic signaling in VSMCs. Migration of rat aortic VSMCs was induced 5.4-fold by PDGF, 4.6-fold by thrombin, and 2.3-fold by insulin-like growth factor I (IGF-I; all values of p < 0.05). The PPARy ligands 15d-PGJ2, RSG, or TRO all inhibited VSMC migration with the following order of potency: 15d-PGJ2 > RSG > TRO. Inhibition of MAPK signaling with PD98059 completely blocked PDGF-, thrombin-, and IGF-I-induced migration. All chemoattractants induced MAPK activation. PPAR.gamma. ligands did not inhibit MAPK activation, suggesting a nuclear effect of these ligands downstream of MAPK. The importance of nuclear events was confirmed because actinomycin D also blocked migration. We conclude that PPAR.gamma. ligands are potent inhibitors of VSMC migration pathways, dependent on MAPK and nuclear events. PPARy ligands act downstream of the cytoplasmic activation of MAPK and appear to exert their effects in the nucleus. Because VSMC migration plays an important role in the formation of atherosclerotic lesions and restenosis, PPARy ligands like TRO and RSG, which ameliorate insulin resistance in humans, also may protect the vasculature from diabetes-enhanced injury.
- 1999:275338 HCAPLUS <<LOGINID::20080311>> AN
- 131:67939 DN
- ΤI PPAR.gamma.-ligands inhibit migration mediated by
- multiple chemoattractants in vascular smooth muscle cells
- Goetze, Stephan; Xi, Xiao-Ping; Kawano, Hiroaki; Gotlibowski, Tina; Fleck, Eckart; Hsueh, Willa A.; Law, Ronald E.
- School of Medicine, Division of Endocrinology, Diabetes and Hypertension, University of California, Los Angeles, Los Angeles, CA, 90095, USA
- Journal of Cardiovascular Pharmacology (1999), 33(5), 798-806 CODEN: JCPCDT; ISSN: 0160-2446
- PB Lippincott Williams & Wilkins
- DT Journal
- T.A English
- RE.CNT 56 THERE ARE 56 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L11 ANSWER 18 OF 19 HCAPLUS COPYRIGHT 2008 ACS on STN
- Peroxisome proliferator-activated receptor gamma activators inhibit gene expression and

migration in human vascular smooth muscle cells

AB Migration of vascular smooth muscle cells (VSMCs) plays an important role in atherogenesis and restenosis after arterial interventions. The expression of matrix metalloproteinases (MMPs), particularly MMP-9, contributes to VSMC migration. This process requires degradation of basal laminae and other components of the arterial extracellular matrix. Peroxisome proliferator-activated receptors (PPARs), members of the nuclear receptor family, regulate gene expression after activation by various ligands. Recent studies have suggested opposing effects of PPAR gamma (PPARy) activation on atherogenesis. The present study tested the hypotheses that human VSMCs express PPAR alpha (PPARa) and PPARy and that PPAR agonists in VSMCs modulate MMP-9 expression and activity, as well as VSMC migration. Human VSMCs expressed PPARa and PPARy mRNA and protein. Treatment of VSMCs with the PPARy ligands troglitazone and the naturally occurring  $15\text{-deoxy-}\Delta12,14\text{-}$ prostaglandin J2 (15d-PGJ2) decreased phorbol 12-myristate 13-acetate-induced MMP-9 mRNA and protein levels, as well as MMP-9 celatinolytic activity in the supernatants in a concentration-dependent manner. Six different PPARa activators lacked such effects. Addition of prostaglandin F2a, known to limit PPARy activity, diminished the MMP-9 inhibition seen with either troglitazone or 15d-PGJ2, further implicating PPARy in these effects. Finally, troglitazone and 15d-PGJ2 inhibited the platelet-derived growth factor-BB-induced migration of VSMCs in vitro in a concentration-dependent manner. PPARy activation may regulate VSMC migration and expression and activity of MMP-9. Thus,

potentially proatherosclerotic PPARy effects. 1998:798928 HCAPLUS <<LOGINID::20080311>>

AN DN 130:137272

TI Peroxisome proliferator-activated

receptor gamma activators inhibit gene expression and migration in human vascular smooth muscle cells Marx, Nikolaus; Schonbeck, Uwe; Lazar, Mitchell A.; Libby, Peter; Plutzky,

ΑU CS Vascular Medicine and Atherosclerosis Unit, Cardiovascular Division,

PPARy activation in VSMCs, via the antidiabetic agent troglitazone or naturally occurring ligands, may act to counterbalance other

- Department of Medicine, Harvard Medical School, Brigham and Women's Hospital, Boston, MA, 02115, USA
- SO Circulation Research (1998), 83(11), 1097-1103 CODEN: CIRUAL: ISSN: 0009-7330
- PB Lippincott Williams & Wilkins DТ
- Journal
- T.A English

RE.CNT 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L11 ANSWER 19 OF 19 HCAPLUS COPYRIGHT 2008 ACS on STN
- Activation of human aortic smooth-muscle cells is inhibited by PPAR.alpha. but not by PPARy activators
- Peroxisome proliferator-activated receptors (PPARs) are key players in lipid and glucose metabolism and are implicated in metabolic disorders predisposing to atherosclerosis, such as dyslipidemia and diabetes. Whereas PPARy promotes lipid storage by regulating adipocyte differentiation, PPAR $\alpha$  stimulates the  $\beta$ -oxidative degradation of fatty acids. PPARα-deficient mice show a prolonged response to inflammatory stimuli, suggesting that PPARa is also a modulator of inflammation. Hypolipidemic fibrate drugs are PPAR.alpha.

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ligands that inhibit the progressive formation of
     atherosclerotic lesions, which involves chronic inflammatory processes,
     even in the absence of their atherogenic lipoprotein-lowering effect.
     Here we show that PPARa is expressed in human aortic smooth-muscle
     cells, which participate in plaque formation and post-angioplasty
     re-stenosis. In these smooth-muscle cells, we find that PPARa
     ligands, and not PPAR.gamma. ligands, inhibit
     interleukin-1-induced production of interleukin-6 and prostaglandin and
     expression of cvclooxygenase-2. This inhibition of cvclooxygenase-2
     induction occurs transcriptionally as a result of PPARa repression
     of NF-kB signalling. In hyperlipidemic patients, fenofibrate
     treatment decreases the plasma concns. of interleukin-6, fibrinogen and
     C-reactive protein. We conclude that activators of PPAR.alpha.
     inhibit the inflammatory response of aortic smooth-muscle cells
     and decrease the concentration of plasma acute-phase proteins, indicating that
     PPARα in the vascular wall may influence the process of
     atherosclerosis and re-stenosis.
     1998:439036 HCAPLUS <<LOGINID::20080311>>
    129:173485
     Activation of human aortic smooth-muscle cells is inhibited by
     PPAR.alpha. but not by PPARy activators
     Staels, Bart; Koenig, Wolfgang; Habib, Aida; Merval, Regine; Lebret,
     Marilyne; Torra, Ines Pineda; Delerive, Philippe; Fadel, Abdessamad;
     Chinetti, Giulia: Fruchart, Jean-Charles: Natib, Jamila: Maclouf, Jacques:
     Tedqui, Alain
     U325 INSERM, Dep. d'Atherosclerose, Inst. Pasteur, Lille, 59019, Fr.
    Nature (London) (1998), 393(6687), 790-793
     CODEN: NATUAS; ISSN: 0028-0836
    Macmillan Magazines
    Journal
    English
RE.CNT 30
             THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD
             ALL CITATIONS AVAILABLE IN THE RE FORMAT
=> d his
     (FILE 'HOME' ENTERED AT 09:06:15 ON 11 MAR 2008)
     FILE 'HCAPLUS' ENTERED AT 09:08:26 ON 11 MAR 2008
         13099 S NEOTINTIMA OR RESTENOSIS OR STENT
          12209 S (PPAR OR (PEROXISOME PROLIFERATOR-ACTIVATED RECEPTOR))
         632628 S PHOSPHATE OR MONOACYLGLYCEROL OR DIACYLGLYCEROL OR PYROPHOSPH
           100 S L1 AND L2
             1 S L1 AND L2 AND L3
             56 S L4 AND (PY<2004 OR AY<2004 OR PRY<2004)
              0 S L5 AND (PY<2004 OR AY<2004 OR PRY<2004)
     FILE 'STNGUIDE' ENTERED AT 09:08:37 ON 11 MAR 2008
     FILE 'HCAPLUS' ENTERED AT 09:08:51 ON 11 MAR 2008
     FILE 'STNGUIDE' ENTERED AT 09:08:51 ON 11 MAR 2008
     FILE 'HCAPLUS' ENTERED AT 09:10:57 ON 11 MAR 2008
          14301 S NEOINTIMA OR RESTENOSIS OR STENT
          1527 S (PPAR OR (PEROXISOME PROLIFERATOR-ACTIVATED RECEPTOR)) (4A) (IN
             29 S L8 AND L9
             19 S L10 AND (PY<2004 OR AY<2004 OR PRY<2004)
    FILE 'STNGUIDE' ENTERED AT 09:11:04 ON 11 MAR 2008
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## FILE 'HCAPLUS' ENTERED AT 09:11:13 ON 11 MAR 2008

FILE 'STNGUIDE' ENTERED AT 09:11:15 ON 11 MAR 2008

=> log hold

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.06	70.22
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL
CA SUBSCRIBER PRICE	0.00	-16.00

SESSION WILL BE HELD FOR 120 MINUTES

STN INTERNATIONAL SESSION SUSPENDED AT 09:11:22 ON 11 MAR 2008

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID: SSPTAEX01623

PASSWORD:

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FULL ESTIMATED COST	0.06	70.22
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-16.00
=> file hcaplus COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.12	70.28
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-16.00

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=> s neointima or neointimal or stent

1938 NEOINTIMA

2352 NEOINTIMAL

5656 STENT

L12 8522 NEOINTIMA OR NEOINTIMAL OR STENT

=> s 12 and 112

L13 45 L2 AND L12

=> s 19 and 112

L14 16 L9 AND L12

=> s 13 and (PY<2004 or AY<2004 or PRY<2004)

23979567 PY<2004

4765121 AY<2004

4243738 PRY<2004

L15 550214 L3 AND (PY<2004 OR AY<2004 OR PRY<2004)

=> s 13 and (PY<2004 or AY<2004 or PRY<2004)

23979567 PY<2004

4765121 AY<2004 4243738 PRY<2004

L16 550214 L3 AND (PY<2004 OR AY<2004 OR PRY<2004)

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 SINCE FILE
 TOTAL

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=> file hcaplus COST IN U.S. DOLLARS

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FILE COVERS 1907 - 11 Mar 2008 VOL 148 ISS 11 FILE LAST UPDATED: 10 Mar 2008 (20080310/ED)

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=> s 113 and (PY<2004 or AY<2004 or PRY<2004)

23979567 PY<2004 4765121 AY<2004 4243738 PRY<2004

L17 15 L13 AND (PY<2004 OR AY<2004 OR PRY<2004)</p>

=> s 114 and (PY<2004 or AY<2004 or PRY<2004)

23979567 PY<2004 4765121 AY<2004

4243738 PRY<2004

6 L14 AND (PY<2004 OR AY<2004 OR PRY<2004)

=> file stnguide

L18

COST IN U.S. DOLLARS SINCE FILE TOTAL. SESSION ENTRY FULL ESTIMATED COST 2.69 75.72 DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE TOTAL ENTRY SESSION 0.00 CA SUBSCRIBER PRICE -16.00

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FILE CONTAINS CURRENT INFORMATION.
LAST RELOADED: Mar 7, 2008 (20080307/UP).

- L18 ANSWER 1 OF 6 HCAPLUS COPYRIGHT 2008 ACS on STN
- Lysophosphatidic acid analogs and inhibition of neointima
- AB The phospholipid growth factor lysophosphatidic acids (LPAs) containing unsatd. fatty acids (18:1, 18:2 and 20:4) and fatty alcs. containing hydrocarbon chains with more than 4 carbons were capable of inducing a rapid formation of neointima, an initial step in the development of atherosclerotic plaque. LPAs with saturated fatty acids did not induce neointima formation. A Peroxisome Proliferator-Activated Receptors gamma (PPARy)-specific agonist Rosiglitasone also induced a profound formation of neointima. GW9662, a selective and irreversible antagonist of PPARy, abolished LPA- and Rosiglitazone-induced neointima formation, indicating that LPA-induced neointima formation requires the activation of PPARy. These data suggest that LPA analogs that bind to but do not activate downstream signaling of PPARy or antagonists of PPAR.camma, that inhibit PPAR.camma, signaling would be useful in the prevention and/or treatment of neointima formation and atherosclerosis.
- AN 2004:857161 HCAPLUS <<LOGINID::20080311>>
- 141:343506 DN
- TI Lysophosphatidic acid analogs and inhibition of neointima
- formation
- IN Tigyi, Gabor; Baker, Daniel L.; Zhang, Chunxiang PA USA
- so
- U.S. Pat. Appl. Publ., 23 pp. CODEN: USXXCO
- DT Patent
- LA English

FAN.	PA:	1 FENT				KIN	D -	DATE						NO.			ATE	
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		2004:						2004 2007			AU 2	004-	2294	6/		2	0040	409 <
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	WO	2004						2005										
		W:						AU, DE,										
								ID,										
								LV,										
			NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,
								TZ,										
		RW:						MW,										
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- L18 ANSWER 2 OF 6 HCAPLUS COPYRIGHT 2008 ACS on STN
- TI PPAR.gamma, ligand inhibits osteopontin gene
  - expression through interference with binding of nuclear factors to A/T-rich sequence in THP-1 cells
- Peroxisome proliferator-activated receptor y(PPARy) is a AB member of the nuclear receptor superfamily that acts as a key player in adipocyte differentiation, glucose metabolism, and macrophage differentiation. Osteopontin (OPN) a component of extracellular matrix, is elevated during necintimal formation in the vessel wall and is synthesized by macrophages in atherosclerotic plaques. In the present study, we investigated the mol. mechanisms regulating OPN gene expression by PPARy in THP-1 cells, a cell line derived from human monocytic leukemia cells. Northern and Western blot analyses showed that exposure of THP-1 cells to PMA (phorbol 12-myristate 13-acetate) increases OPN mRNA and protein levels in a time-dependent manner. PMA-induced OPN expression was significantly decreased by troglitazone (Tro) and other PPARy ligands. Transient transfection assays of the human OPN promoter/luciferase construct showed that PPARy represses OPN promoter activity, and the PPARy-responsive region within the OPN promoter lies between -1000 and -970 relative to the transcription start site. Site-specific mutation anal. and electrophoretic mobility shift assays indicated that a homeobox-like A/T-rich sequence between -990 and 981, which functions as a binding site for PMA-induced nuclear factors other than PPARy, mediates the repression of OPN expression by Tro. Furthermore, concatenated A/T-rich sequences conferred the PPARy responsiveness on the heterologous promoter. Taken together, these data suggest that PPAR.gamma. ligand inhibits OPN gene expression through the interference with the binding of nuclear factors to
- A/T-rich sequence in THP-1 cells. AN 2002:162012 HCAPLUS <<LOGINID::20080311>>
- DN 136:338695
- TI PPAR.gamma. ligand inhibits osteopontin gene
- expression through interference with binding of nuclear factors to A/T-rich sequence in THP-1 cells
- AU Oyama, Yuko; Akuzawa, Nobuhiro; Nagai, Ryozo; Kurabayashi, Masahiko
- CS Second Department of Internal Medicine, Gunma University School of Medicine, Maebashl, 371-8511, Japan
- SO Circulation Research (2002), 90(3), 348-355 CODEN: CIRUAL; ISSN: 0009-7330
- PB Lippincott Williams & Wilkins
- DT Journal
- LA English
- RE.CNT 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L18 ANSWER 3 OF 6 HCAPLUS COPYRIGHT 2008 ACS on STN

smooth muscle cells by interfering with Smad3

- TI Peroxisome proliferator-activated receptor γ inhibits transforming growth factor β-induced connective tissue growth factor expression in human aortic
- AB Activation of peroxisome proliferator-activated receptor γ (PPARγ) after balloon injury significantly inhibits VSMC proliferation and neointima formation. However, the precise mechanisms of this inhibition have not been determined The authors hypothesized that activation of PPARγ in vascular injury could attenuate VSMC growth and matrix production during vascular lesion formation. Since connective tissue growth factor (CTGF) is a key factor regulating extracellular matrix production, abrogation of transforming growth factor β (TGF-β)-induced CTGF production by PPARγ activation may be

one of the mechanisms through which PPAR.gamma. agonists inhibit neointima formation after vascular injury. In this study, the authors demonstrate that the PPARy natural liquid (15-deoxyprostaglandin J2) and a synthetic ligand (GW7845) significantly inhibit TGF-β-induced CTGF production in a dose-dependent manner in HASMCs. In addition, suppression of CTGF mRNA expression is relieved by pretreatment with an antagonist of PPARy (GW9662), suggesting that the inhibition of CTGF expression is mediated by PPARy. To elucidate further the mol. mechanism by which PPAR.gamma. inhibits CTGF expression, an .apprx.2-kilobase pair CTGF promoter was cloned. The authors found that PPAR.gamma, activation inhibits TGF-β-induced CTGF promoter activity in a dose-dependent manner, and suppression of CTGF promoter activity by PPARy activation is completely rescued by overexpression of Smad3, but not by Smad4. Furthermore, PPARy phys. interacts with Smad3 but not Smad4 in vitro in glutathione S-transferase pull-down expts. Taken together, the data suggest that PPAR.gamma. inhibits TGF-β-induced CTGF expression in HASMCs by directly interfering with the Smad3 signaling pathway.

- AN 2001:908512 HCAPLUS <<LOGINID::20080311>>
- DN 136:198017
- TI Peroxisome proliferator-activated receptor γ inhibits transforming growth factor
- $\beta$ -induced connective tissue growth factor expression in human aortic smooth muscle cells by interfering with Smad3
- AU Fu, Mingui; Zhang, Jifeng; Zhu, Xiaojun; Myles, David E.; Willson, Timothy M.; Liu, Xuedong; Chen, Yuqing E.
- CS Cardiovascular Research Institute, Morehouse School of Medicine, Atlanta, GA, 30310, USA
- SO Journal of Biological Chemistry (2001), 276(49), 45888-45894 CODEN: JBCHA3; ISSN: 0021-9258
- PB American Society for Biochemistry and Molecular Biology
- DT Journal
- LA English
- RE.CNT 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L18 ANSWER 4 OF 6 HCAPLUS COPYRIGHT 2008 ACS on STN
- TI Control of vascular cell proliferation and migration by PPAR-γ: A new approach to the macrovascular complications of diabetes
- A review with 82 refs. Compared with nondiabetic subjects, type 2 diabetic individuals are at an increased risk for coronary artery disease and coronary restenosis after angioplasty or stenting. Increased proliferation and migration of vascular smooth muscle cells (VSMCs) contribute importantly to the formation of both atherosclerotic and restenotic lesions. Therefore, pharmaceutical interventions targeting proteins that regulate VSMC growth or movement are a promising new approach to treat diabetes-associated cardiovascular disease. Peroxisome proliferator-activated receptor-y (PPAR-y) is a member of the nuclear receptor superfamily that, when activated by thiazolidinedione (TZD) insulin sensitizers, regulates a host of target genes. All of the major cells in the vasculature express PPAR-γ, including endothelial cells, VSMCs, and monocytes/macrophages. PPAR-y is present in intimal macrophages and VSMCs in early human atheromas. In an animal model of vascular injury, PPAR-γ levels are substantially elevated in the neointima that forms after mech. injury of the endothelium. Recent exptl. studies provide evidence that PPAR- $\gamma$  may function to protect the vasculature from injury. Cell culture studies have shown that TZD PPAR-γ ligands inhibit both the proliferation and migration of VSMCs. These antiatherogenic activities of PPAR-y may also occur in vivo, because TZDs inhibit

lesion formation in several animal models. PPAR-y ligands may also protect the vasculature indirectly by normalizing metabolic abnormalities of the diabetic milieu that increase cardiovascular risk. Activation of PPAR-y, newly defined in vascular cells, may be a useful approach to protect the vasculature in diabetes.

AN 2001:136312 HCAPLUS <<LOGINID::20080311>>

DN 134:235155

Control of vascular cell proliferation and migration by PPAR-y: A new approach to the macrovascular complications of diabetes

ΑU Hsueh, Willa A.; Jackson, Simon; Law, Ronald E.

- CS Department of Medicine, the Endocrinology, Diabetes, and Hypertension Division, University of California School of Medicine, Los Angeles, CA, 90095-7073, USA
- SO Diabetes Care (2001), 24(2), 392-397 CODEN: DICAD2; ISSN: 0149-5992

PR American Diabetes Association, Inc.

- Journal: General Review
- DT

LA English

- RE.CNT 82 THERE ARE 82 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L18 ANSWER 5 OF 6 HCAPLUS COPYRIGHT 2008 ACS on STN
- TI Peroxisome proliferator-activated receptor v activators downregulate

anciotensin II type 1 receptor in vascular smooth muscle cells

Peroxisome proliferator-activated receptor y (PPARy) activators, such as troglitazone (Tro), not only improve insulin resistance but also suppress the neointimal formation after balloon injury. However, the precise mechanisms have not been determined Angiotensin II (Ang II) plays crucial roles in the pathogenesis of atherosclerosis, hypertension, and neointimal formation after angioplasty. The authors examined the effect of PPARy activators on the expression of Ang II type 1 receptor (AT1-R) in cultured vascular smooth muscle cells (VSMCs). AT1-R mRNA and AT1-R protein levels were determined by Northern blot anal. and radioligand binding assay, resp. Natural PPARy ligand 15-deoxy-A12.14-prostaglandin J2, as well as Tro, reduced the AT1-R mRNA expression and the AT1-R protein level.

II. PPARy activators suppressed the AT1-R promoter activity measured by luciferase assay but did not affect the AT1-R mRNA stability, suggesting that the suppression occurs at the transcriptional level. PPARy activators reduced the AT1-R expression and calcium response

to Ang II in VSMCs. Downregulation of AT1-R may contribute to the inhibition of neointimal formation by PPAR v activators.

PPARy activators also reduced the calcium response of VSMCs to Ang

AN 2000:759543 HCAPLUS <<LOGINID::20080311>>

DN 134:66617

- ΤТ Peroxisome proliferator-activated receptor  $\gamma$  activators downregulate andiotensin II type 1 receptor in vascular smooth muscle cells
- Takeda, Kotaro; Ichiki, Toshihiro; Tokunou, Tomotake; Funakoshi, Yuko; ΑU Iino, Naoko; Hirano, Katsuya; Kanaide, Hideo; Takeshita, Akira
- Departments of Cardiovascular Medicine, Kyushu University Graduate School
- of Medical Sciences, Fukuoka, 812-8582, Japan Circulation (2000), 102(15), 1834-1839
- CODEN: CIRCAZ; ISSN: 0009-7322 Lippincott Williams & Wilkins
- DT Journal
- LA English
- RE.CNT 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L18 ANSWER 6 OF 6 HCAPLUS COPYRIGHT 2008 ACS on STN

```
TT
    Expression and function of PPARy in rat and human vascular smooth
    muscle cells
```

- AB Peroxisome proliferator-activated receptor-y (PPARy) is activated by fatty acids, eicosanoids, and insulin-sensitizing thiazolidinediones (TZDs). The TZD troglitazone (TRO) inhibits vascular smooth muscle cell (VSMC) proliferation and migration in vitro and in post-injury intimal hyperplasia. Rat and human VSMCs expressed mRNA and nuclear PPARy1. Three PPARy ligands, the TZDs TRO and rosiglitazone and the prostanoid 15-deoxy-A12,14-prostaglandin J2 (15d-PGJ2), all inhibited VSMC proliferation and migration. PPARy was upregulated in rat neointima at 7 days and 14 days after balloon injury and was also present in early human atheroma and precursor lesions. Thus, pharmacol. activation of PPAR.gamma. expressed in VSMCs inhibits their proliferation and migration, potentially limiting restenosis and atherosclerosis. These receptors are upregulated during vascular injury.
- 2000:240919 HCAPLUS <<LOGINID::20080311>> ΔN
- DN 133:148479
- ΤI Expression and function of PPARy in rat and human vascular smooth muscle cells
- ΑU Law, Ronald E.; Goetze, Stephan; Xi, Xiao-Ping; Jackson, Simon; Kawano, Yasuko; Demer, Linda; Fishbein, Michael C.; Meehan, Woerner P.; Hsueh, Willa A.
- Department of Medicine, University of California at Los Angeles School of Medicine, Los Angeles, CA, 90095, USA Circulation (2000), 101(11), 1311-1318 SO
- CODEN: CIRCAZ; ISSN: 0009-7322
- Lippincott Williams & Wilkins PB
- DT Journal
- LA English
- RE.CNT 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

## => d his

L4

(FILE 'HOME' ENTERED AT 09:06:15 ON 11 MAR 2008)

FILE 'HCAPLUS' ENTERED AT 09:08:26 ON 11 MAR 2008

- L1 13099 S NEOTINTIMA OR RESTENOSIS OR STENT
- L2 12209 S (PPAR OR (PEROXISOME PROLIFERATOR-ACTIVATED RECEPTOR))
- L3 632628 S PHOSPHATE OR MONOACYLGLYCEROL OR DIACYLGLYCEROL OR PYROPHOSPH
  - 100 S L1 AND L2
- L5 1 S L1 AND L2 AND L3
- L6 56 S L4 AND (PY<2004 OR AY<2004 OR PRY<2004)
  - 0 S L5 AND (PY<2004 OR AY<2004 OR PRY<2004)
    - FILE 'STNGUIDE' ENTERED AT 09:08:37 ON 11 MAR 2008
    - FILE 'HCAPLUS' ENTERED AT 09:08:51 ON 11 MAR 2008
    - FILE 'STNGUIDE' ENTERED AT 09:08:51 ON 11 MAR 2008
  - FILE 'HCAPLUS' ENTERED AT 09:10:57 ON 11 MAR 2008
- 14301 S NEOINTIMA OR RESTENOSIS OR STENT L9 1527 S (PPAR OR (PEROXISOME PROLIFERATOR-ACTIVATED RECEPTOR)) (4A) (IN
- L10 29 S L8 AND L9
- 19 S L10 AND (PY<2004 OR AY<2004 OR PRY<2004)
  - FILE 'STNGUIDE' ENTERED AT 09:11:04 ON 11 MAR 2008

FILE 'HCAPLUS' ENTERED AT 09:11:13 ON 11 MAR 2008

FILE 'STNGUIDE' ENTERED AT 09:11:15 ON 11 MAR 2008

FILE 'HCAPLUS' ENTERED AT 09:42:17 ON 11 MAR 2008 8522 S NEOINTIMA OR NEOINTIMAL OR STENT L12

L13 45 S L2 AND L12

L14 16 S L9 AND L12

550214 S L3 AND (PY<2004 OR AY<2004 OR PRY<2004)

L15 L16 550214 S L3 AND (PY<2004 OR AY<2004 OR PRY<2004)

FILE 'STNGUIDE' ENTERED AT 09:42:28 ON 11 MAR 2008

FILE 'HCAPLUS' ENTERED AT 09:42:49 ON 11 MAR 2008

15 S L13 AND (PY<2004 OR AY<2004 OR PRY<2004) L18 6 S L14 AND (PY<2004 OR AY<2004 OR PRY<2004)

FILE 'STNGUIDE' ENTERED AT 09:42:55 ON 11 MAR 2008

FILE 'HCAPLUS' ENTERED AT 09:43:04 ON 11 MAR 2008

FILE 'STNGUIDE' ENTERED AT 09:43:04 ON 11 MAR 2008

=> log hold

COST IN U.S. DOLLARS SINCE FILE TOTAL SESSION ENTRY FULL ESTIMATED COST 0.06 95.99

DISCOUNT AMOUNTS (FOR OUALIFYING ACCOUNTS) SINCE FILE TOTAL SESSION ENTRY

CA SUBSCRIBER PRICE 0.00 -20.80

SESSION WILL BE HELD FOR 120 MINUTES

STN INTERNATIONAL SESSION SUSPENDED AT 09:43:10 ON 11 MAR 2008

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID: SSPTAEX01623

PASSWORD:

\* \* \* \* \* \* RECONNECTED TO STN INTERNATIONAL \* \* \* \* \* SESSION RESUMED IN FILE 'STNGUIDE' AT 09:58:34 ON 11 MAR 2008 FILE 'STNGUIDE' ENTERED AT 09:58:34 ON 11 MAR 2008

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COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION FULL ESTIMATED COST 0.06 95.99

DISCOUNT AMOUNTS (FOR OUALIFYING ACCOUNTS) SINCE FILE TOTAL SESSION ENTRY

CA SUBSCRIBER PRICE 0.00 -20.80

=> file registry COST IN U.S. DOLLARS SINCE FILE TOTAL. ENTRY SESSION FULL ESTIMATED COST 0.06 95.99

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE TOTAL. SESSION ENTRY CA SUBSCRIBER PRICE 0.00 -20.80

FILE 'REGISTRY' ENTERED AT 09:58:41 ON 11 MAR 2008 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2008 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 10 MAR 2008 HIGHEST RN 1007341-18-5 DICTIONARY FILE UPDATES: 10 MAR 2008 HIGHEST RN 1007341-18-5

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH January 9, 2008.

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html LYSOPEPTIN B/CN

VORUS STRAIN HD100)/CN

IMAGE: 6649895)/CN

=> exp lysophosphatid/cn

E7

ER

1

1

D1	1	DISOPERIIN B/CN
E2	1	LYSOPHOPHOLIPASE (SACCHAROMYCES CEREVISIAE STRAIN S288C GENEPLB1)/CN
E3	0>	LYSOPHOSPHATID/CN
E4	1	LYSOPHOSPHATIDALCHOLINES, Γ-O-1-HEXADECENYL-A/CN
E5	1	LYSOPHOSPHATIDALCHOLINES, Γ-O-1-PENTADECENYL-A/C
		N
E6	1	LYSOPHOSPHATIDALETHANOLAMINE ACYLTRANSFERASE/CN
E7	1	LYSOPHOSPHATIDASE/CN
E8	1	LYSOPHOSPHATIDATE ACYLTRANSFERASE/CN
E9	1	LYSOPHOSPHATIDATE LYSOPHOSPHOLIPASE A1/CN
E10	1	LYSOPHOSPHATIDATE PHOSPHATASE/CN
E11	1	LYSOPHOSPHATIDATE PHOSPHOHYDROLASE/CN
E12	1	LYSOPHOSPHATIDATE RECEPTOR (HUMAN JURKAT T CELL GENE EDG7)/C
		N
=> exp lysop	hospha	
E1	1	LYSOPHOSPHATIDE ACYLTRANSFERASE/CN
E2	1	LYSOPHOSPHATIDES, LYSOCARDIOLIPINS, CATTLE HEART, SODIUM SAL
		TS/CN
E3		LYSOPHOSPHATIDIC/CN
E 4	1	LYSOPHOSPHATIDIC ACID ACYL TRANSFERASE (HUMAN SEQUENCE HOMOL
		OG) /CN
E5	1	LYSOPHOSPHATIDIC ACID ACYLTRANSFERASE/CN
E6	1	LYSOPHOSPHATIDIC ACID ACYLTRANSFERASE (BDELLOVIBRIO BACTERIO

LYSOPHOSPHATIDIC ACID ACYLTRANSFERASE (HUMAN CLONE MGC:59880

LYSOPHOSPHATIDIC ACID ACYLTRANSFERASE (HUMAN CLONE MGC:71254

```
IMAGE: 6577569)/CN
E9
                   LYSOPHOSPHATIDIC ACID ACYLTRANSFERASE (HUMAN ISOENZYME LPAAT
                   -Z)/CN
E10
             1
                   LYSOPHOSPHATIDIC ACID ACYLTRANSFERASE (KUENENIA STUTTGARTIEN
                   SIS GENE NLAB)/CN
                   LYSOPHOSPHATIDIC ACID ACYLTRANSFERASE (MOUSE STRAIN FVB/N CL
E11
             1
                   ONE MGC:28958 IMAGE:4457846)/CN
E12
             1
                   LYSOPHOSPHATIDIC ACID ACYLTRANSFERASE (ORYZA SATIVA JAPONICA
                    GENE OSJNBA0017E08.6)/CN
=> exp lysophosphatidic acid/cn
E1
             1
                   LYSOPHOSPHATIDE ACYLTRANSFERASE/CN
E2
             1
                   LYSOPHOSPHATIDES, LYSOCARDIOLIPINS, CATTLE HEART, SODIUM SAL
                   TS/CN
E3
             0 --> LYSOPHOSPHATIDIC ACID/CN
E4
                   LYSOPHOSPHATIDIC ACID ACYL TRANSFERASE (HUMAN SEQUENCE HOMOL
             1
                   OG)/CN
E5
             1
                   LYSOPHOSPHATIDIC ACID ACYLTRANSFERASE/CN
E6
                   LYSOPHOSPHATIDIC ACID ACYLTRANSFERASE (BDELLOVIBRIO BACTERIO
             1
                   VORUS STRAIN HD100)/CN
E7
             1
                   LYSOPHOSPHATIDIC ACID ACYLTRANSFERASE (HUMAN CLONE MGC: 59880
                    IMAGE: 6649895)/CN
E8
             1
                   LYSOPHOSPHATIDIC ACID ACYLTRANSFERASE (HUMAN CLONE MGC:71254
                    IMAGE: 6577569)/CN
                   LYSOPHOSPHATIDIC ACID ACYLTRANSFERASE (HUMAN ISOENZYME LPAAT
             1
                   -Z)/CN
                   LYSOPHOSPHATIDIC ACID ACYLTRANSFERASE (KUENENIA STUTTGARTIEN
                   SIS GENE NLAB)/CN
E11
             1
                   LYSOPHOSPHATIDIC ACID ACYLTRANSFERASE (MOUSE STRAIN FVB/N CL
                   ONE MGC:28958 IMAGE:4457846)/CN
E12
                   LYSOPHOSPHATIDIC ACID ACYLTRANSFERASE (ORYZA SATIVA JAPONICA
                   GENE OSJNBA0017E08.6)/CN
=> exp lpa/cn
             1
                   LP85 (277-PROLINE) (HUMAN PRECURSOR)/CN
E2
             1
                   LP85 (279-PROLINE) (HUMAN PRECURSOR),/CN
E3
             1 --> LPA/CN
Ε4
             1
                  LPA 170/CN
E5
             1
                  LPA 2/CN
Ε6
                  LPA 210/CN
             1
                  LPA 2SC/CN
E7
             1
E8
             1
                  LPA 3/CN
E9
             1
                  LPA 3500/CN
E10
             1
                  LPA 39/CN
E11
             1
                  LPA 47/CN
E12
                  LPA-2 RECEPTOR (HUMAN LYSOPHOSPHATIDIC ACID RECEPTOR 2)/CN
             1
=> s e3
L19
             1 LPA/CN
=> d 119
L19 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2008 ACS on STN
     142-54-1 REGISTRY
     Entered STN: 16 Nov 1984
    Dodecanamide, N-(2-hydroxypropy1)- (CA INDEX NAME)
OTHER NAMES:
CN
    2-Hydroxypropyllauramide
CN
    Alkamide LIPA
CN
    Amisol PLME
CN
   Clindrol 101LI
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CN Clindrol 102LI
CN
    Comperlan LP
CN Cyclomide LP
CN Lauramide MIPA
CN Lauric acid isopropanolamide
CN Lauric acid monoisopropanolamide
CN Lauric isopropanolamide
CN Lauric monoisopropanolamide
CN Laurovl isopropanolamide
CN Laurvl isopropanolamide
CN Lauryl monoisopropanolamide
CN
   LIPA
CN
    LPA
CN
    N-(β-Hydroxypropyl)lauramide
CN
    N-(2-Hydroxy-1-propyl)lauramide
CN
    N-(2-Hydroxypropyl)dodecanamide
CM
    Profan AD31
CN
    Stafoam LIPA
    Steinamid IPL 203
CN
CN
    Ultrapole L
MF
    C15 H31 N O2
    COM
LC
    STN Files: BEILSTEIN*, BIOSIS, CA, CAOLD, CAPLUS, CHEMLIST, CSCHEM,
       IFICDB, IFIPAT, IFIUDB, MSDS-OHS, TOXCENTER, USPAT2, USPATFULL, USPATOLD
         (*File contains numerically searchable property data)
     Other Sources: DSL**, EINECS**, TSCA**
         (**Enter CHEMLIST File for up-to-date regulatory information)
```

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

143 REFERENCES IN FILE CA (1907 TO DATE)

2 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

143 REFERENCES IN FILE CAPLUS (1907 TO DATE)

15 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> file stnguide

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=> file hcaplus

COST IN U.S. DOLLARS
SINCE FILE ENTRY SESSION
FULL ESTIMATED COST 0.24 104.30

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE ENTRY SESSION
ENTRY SESSION

0.00

-20.80

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FILE COVERS 1907 - 11 Mar 2008 VOL 148 ISS 11 FILE LAST UPDATED: 10 Mar 2008 (20080310/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s lysophosphatidic acid

CA SUBSCRIBER PRICE

3386 LYSOPHOSPHATIDIC 4543306 ACID

L20 2675 LYSOPHOSPHATIDIC ACID

(LYSOPHOSPHATIDIC(W)ACID)

=> s 120 and 12

L21 38 L20 AND L2

=> s 110 and 19

L22 29 L10 AND L9

=> s 121 and 112

L23 4 L21 AND L12

=> s 122 and 112

L24 12 L22 AND L12

=> s 123 and (PY<2004 or AY<2004 or PRY<2004)

23979567 PY<2004 4765121 AY<2004

4243738 PRY<2004

L25 1 L23 AND (PY<2004 OR AY<2004 OR PRY<2004)

=> s 124 and (PY<2004 or AY<2004 or PRY<2004)

23979567 PY<2004 4765121 AY<2004 4243738 PRY<2004

L26 4 L24 AND (PY<2004 OR AY<2004 OR PRY<2004)

=> file stnguide

 COST IN U.S. DOLLARS
 SINCE FILE ENTRY
 TOTAL SESSION

 FULL ESTIMATED COST
 2.69
 106.99

 DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)
 SINCE FILE ENTRY SESSION CASUBER PRICE
 TOTAL ENTRY SESSION CASUBLE PRICE

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=> file hcaplus
COST IN U.S. DOLLARS
SINCE FILE TOTAL
ENTRY SESSION
FULL ESTIMATED COST 0.06 107.05

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)
CA SUBSCRIBER PRICE 5.00 - 20.80

- 20.80

- 20.80

- 20.80

- 20.80

- 20.80

- 20.80

FILE 'HCAPLUS' ENTERED AT 10:03:02 ON 11 MAR 2008 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

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FILE COVERS 1907 - 11 Mar 2008 VOL 148 ISS 11 FILE LAST UPDATED: 10 Mar 2008 (20080310/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 120 and 19

L27 9 L20 AND L9

=> s 127 and 112

I.28 2 I.27 AND I.12

=> s 128 and (PY<2004 or AY<2004 or PRY<2004)

23979567 PY<2004 4765121 AY<2004 4243738 PRY<2004

L29 1 L28 AND (PY<2004 OR AY<2004 OR PRY<2004)

=> file stnguide

 COST IN U.S. DOLLARS
 SINCE FILE ENTRY
 TOTAL SESSION

 FULL ESTIMATED COST
 2.69
 109.74

 DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)
 SINCE FILE ENTRY SESSION O. 0.0
 TOTAL SESSION O. -20.80

FILE 'SINGUIDE' ENTERED AT 10:03:06 ON 11 MAR 2008 USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

FILE CONTAINS CURRENT INFORMATION.
LAST RELOADED: Mar 7, 2008 (20080307/UP).

=> file hcaplus

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New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 121 and (PY<2004 or AY<2004 or PRY<2004)

23979567 PY<2004 4765121 AY<2004

4243738 PRY<2004

L30 7 L21 AND (PY<2004 OR AY<2004 OR PRY<2004)

=> s 127 and (PY<2004 or AY<2004 or PRY<2004)

23979567 PY<2004 4765121 AY<2004 4243738 PRY<2004

L31 1 L27 AND (PY<2004 OR AY<2004 OR PRY<2004)

=> file stnguide

CA SUBSCRIBER PRICE

COST IN U.S. DOLLARS SINCE FILE TOTAL SESSION ENTRY FULL ESTIMATED COST 2.69 112.49 DISCOUNT AMOUNTS (FOR OUALIFYING ACCOUNTS) SINCE FILE TOTAL SESSION ENTRY -20.80

0.00

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FILE CONTAINS CURRENT INFORMATION. LAST RELOADED: Mar 7, 2008 (20080307/UP).

=> d 130 1-7 ti abs bib

YOU HAVE REQUESTED DATA FROM FILE 'HCAPLUS' - CONTINUE? (Y)/N:v

L30 ANSWER 1 OF 7 HCAPLUS COPYRIGHT 2008 ACS on STN Gene expression profiles and biomarkers for the detection of

depression-related and other disease-related gene transcripts in blood The present invention is directed to detection and measurement of gene transcripts and their equivalent nucleic acid products in blood. Specifically provided is anal. performed on a drop of blood for detecting, diagnosing, and monitoring diseases, and in particular mental depression, using gene-specific and/or tissue-specific primers. Affymetrix Human Genome U133 and ChondroChip microarrays were used to detect differentially expressed gene transcripts in hypertension, obesity, allergy, systemic steroids, coronary artery disease, diabetes type 2, hyperlipidemia, lung disease, bladder cancer, rheumatoid arthritis, osteoarthritis, liver cancer, schizophrenia, Chagas disease, asthma, and manic depression syndrome. The present invention describes methods by which delineation of the sequence and/or quantitation of the expression levels of disease-specific genes allows for an immediate and accurate diagnostic/prognostic test for disease or to assess the effect of a particular treatment regimen.

AN 2005:1997 HCAPLUS <<LOGINID::20080311>>

DN 142:111841

ΤТ Gene expression profiles and biomarkers for the detection of

depression-related and other disease-related gene transcripts in blood

IN Liew, Choong-Chin

- PA Chondrogene Limited, Can.
- U.S. Pat. Appl. Publ., 154 pp., Cont.-in-part of U.S. Ser. No. 802,875. SO CODEN: USXXCO
- DT Patent
- LA English

FAN.	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI PRAI	PATENT NO.  US 2004265868 US 2004014059 US 2007031841 US 2006134635 US 2005191637 US 2005196762 US 2005196763 US 2005196764 US 2005208505	KIND A1 A2 A2 A2 P P P P	DATE	APPLICATION NO.  US 2004-812702 US 2002-268730 US 2003-601518 US 2004-803875 US 2004-803875 US 2004-803857 US 2004-803857 US 2004-803858 US 2004-803858 C < < < < <	DATE
	US 2002-85783	A2	20020228	<	

- L30 ANSWER 2 OF 7 HCAPLUS COPYRIGHT 2008 ACS on STN Lysophosphatidic acid analogs and inhibition of
- TI
- neointima formation AB
- The phospholipid growth factor lysophosphatidic acids (LPAs) containing unsatd. fatty acids (18:1, 18:2 and 20:4) and fatty alcs. containing hydrocarbon chains with more than 4 carbons were capable of inducing a rapid formation of neointima, an initial step in the development of atherosclerotic plaque. LPAs with saturated fatty acids did not induce neointima formation. A Peroxisome Proliferator-Activated Receptors gamma (PPAR.gamma.)-specific agonist Rosiglitasone also induced a profound formation of neointima. GW9662, a selective and irreversible antagonist of PPAR.gamma., abolished LPA- and Rosiglitazone-induced neointima formation, indicating that LPA-induced neointima formation requires the activation of PPAR.gamma.. These data suggest that LPA analogs that bind to but do not activate downstream signaling of PPAR.gamma. or antagonists of PPAR.gamma. that inhibit PPAR.gamma. signaling would be

useful in the prevention and/or treatment of neointima formation and

- 2004:857161 HCAPLUS <<LOGINID::20080311>> AN
- 141:343506 DN
- Lysophosphatidic acid analogs and inhibition of TI
- neointima formation

atherosclerosis.

- IN Tigyi, Gabor; Baker, Daniel L.; Zhang, Chunxiang PA
- U.S. Pat. Appl. Publ., 23 pp. SO CODEN: USXXCO
- Patent
- LA English
- FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2004204383	A1	20041014	US 2004-821739	20040409 <
	AU 2004229467	A1	20041028	AU 2004-229467	20040409 <

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AU 2004229467
                       B2
                              20070125
    CA 2521189
                        A1
                              20041028 CA 2004-2521189
                                                               20040409 <--
    WO 2004091496
                        A2
                              20041028
                                         WO 2004-US11016
                                                                20040409 <--
    WO 2004091496
                        A3
                              20050324
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
            CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
            GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
            LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
            NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
            TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
        RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
            BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE,
            ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,
            SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN,
            TD, TG
    EP 1613298
                        A2
                             20060111 EP 2004-759365
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR
    JP 2007525449
                        Т
                              20070906 JP 2006-509874
                                                                20040409 <--
PRAI US 2003-462274P
                       P
                               20030411 <--
    WO 2004-US11016
                        W
                               20040409
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- L30 ANSWER 3 OF 7 HCAPLUS COPYRIGHT 2008 ACS on STN
- TI Lysophosphatidic acid signaling: how a small lipid does big things. [Erratum to document cited in CA139:211216]
- AB A review. The corrected version of Figure 2 is given.
- AN 2003:728621 HCAPLUS <<LOGINID::20080311>>
- DN 141:68526
- TI Lysophosphatidic acid signaling: how a small lipid
- does big things. [Erratum to document cited in CA139:211216] AU Luquain, CelineAnon.; Sciorra, Vicki A.; Morris, Andrew J.
- CS Lineberger Comprehensive Cancer Center, Department of Cell Developmental Biology, The University of North Carolina at Chapel Hill, Chapel Hill, NC, 27699-7090, USA
- SO Trends in Biochemical Sciences (2003), 28(9), 478
- CODEN: TBSCDB; ISSN: 0968-0004
- PB Elsevier Science Ltd.
- DT Journal; General Review
- LA English
- L30 ANSWER 4 OF 7 HCAPLUS COPYRIGHT 2008 ACS on STN
- TI Lysophosphatidic acid signaling: how a small lipid does big things
- AB A review. Lysophosphatidic acid (LPA) promotes

growth, differentiation, survival and motility in many different cell types. LPA has therefore been suggested to play a central role in a broad range of physiol. and pathophysiol. processes, including vascular and neuronal function and cancer. Three closely related G-protein-coupled cell-surface receptors mediate some of these effects, but assigning specific functions to particular receptor subtypes has been challenging and several lines of evidence indicate that other LPA signaling mechanisms might exist. Although the signaling actions of LPA have been studied widely, much less is known about how LPA is generated and released into the extracellular space, and how its signaling actions are terminated. Newly identified enzymes that generate and inactivate LPA have novel roles in cancer progression and early development, and a recent study indicates that LPA might regulate nuclear gene transcription directly. These findings provide novel insights into mechanisms involved in the synthesis, actions and inactivation of LPA, and the proteins involved provide new targets that can be exploited to manipulate LPA signaling at both cellular and organismal levels.

- AN 2003:564080 HCAPLUS <<LOGINID::20080311>>
- DN 139:211216
- Lysophosphatidic acid signaling: how a small lipid does big things
- Luquain, Celine; Sciorra, Vicki A.; Morris, Andrew J. AΠ
- CS Lineberger Comprehensive Cancer Center, Department of Cell and Developmental Biology, The University of North Carolina at Chapel Hill, Chapel Hill, NC, 27699-7090, USA
- SO Trends in Biochemical Sciences (2003), 28(7), 377-383 CODEN: TBSCDB; ISSN: 0968-0004
- PB Elsevier Science Ltd.
- DT Journal; General Review
- LA English
- RE.CNT 49 THERE ARE 49 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L30 ANSWER 5 OF 7 HCAPLUS COPYRIGHT 2008 ACS on STN
- ΤI Synthesis of Monofluorinated Analogues of Lysophosphatidic Acid
- AB Lysophosphatidic acid (LPA, 1- or 2-acyl-sn-glycerol 3-phosphate) displays an intriguing cell biol, that is mediated via interactions both with G-protein coupled seven transmembrane receptors and with the nuclear hormone receptor PPAR.camma.. Synthesis and biol, activities of fluorinated analogs of LPA are still relatively unknown. In an effort to identify receptor-selective LPA analogs and to document in detail the structure-activity relationships of fluorinated LPA isosteres, we describe a series of monofluorinated LPA analogs in which either the sn-1 or the sn-2 hydroxy group was replaced by fluorine, or the bridging oxygen in the monophosphate was replaced by an  $\alpha$ -monofluoromethylene (-CHF-) moiety. The sn-1 or sn-2 monofluorinated LPA analogs were enantiospecifically prepared from chiral protected glycerol synthons, and the  $\alpha$ -monofluoromethylenesubstituted LPA analogs were prepared from a racemic epoxide with use of a hydrolytic kinetic resolution The sn-2 and sn-1 fluoro LPA analogs were unable to undergo acyl migration, effectively "freezing" them in the sn-1-0-acyl or sn-2-0-acyl forms, resp. The  $\alpha$ -monofluoromethylene LPA analogs were unique new nonhydrolyzable ligands with surprising enantiospecific and receptor-specific biol. readouts, with one compound showing a 1000-fold higher activity than native LPA for one receptor subtype.
- AN 2003:418219 HCAPLUS <<LOGINID::20080311>>
- DN 139:133754
- TΙ Synthesis of Monofluorinated Analogues of Lysophosphatidic Acid
- AU Xu, Yong; Qian, Lian; Prestwich, Glenn D.
- CS Department of Medicinal Chemistry and The Center for Cell Signaling, University of Utah, Salt Lake City, UT, 84108-1257, USA
- Journal of Organic Chemistry (2003), 68(13), 5320-5330 SO CODEN: JOCEAH: ISSN: 0022-3263
- American Chemical Society PB
- DT Journal
- LA English
- CASREACT 139:133754
- THERE ARE 54 CITED REFERENCES AVAILABLE FOR THIS RECORD RE.CNT 54 ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L30 ANSWER 6 OF 7 HCAPLUS COPYRIGHT 2008 ACS on STN
- Identification of an intracellular receptor for lysophosphatidic acid (LPA): LPA is a transcellular PPAR.gamma. agonist. [Erratum to document cited in CA139:98489]
- AR Figure 4 should have appeared in color; the correct figure and its legend

are given. 2003:155856 HCAPLUS <<LOGINID::20080311>>

- AN DN 140:39353
- Identification of an intracellular receptor for lysophosphatidic acid (LPA): LPA is a transcellular PPAR.gamma. agonist.
- [Erratum to document cited in CA139:98489] McIntyre, Thomas M.; Pontsler, Aaron V.; Silva, Adriana R.; St. Hilaire, AU Andy; Xu, Yong; Hinshaw, Jerald C.; Zimmerman, Guy A.; Hama, Kotaro; Aoki, Junken; Arai, Hirovuki; Prestwich, Glenn D.
- Program in Human Molecular Biology and Genetics, and Department of Medicine, University of Utah, Salt Lake City, UT, 84112-5330, USA
- SO Proceedings of the National Academy of Sciences of the United States of America (2003), 100(4), 2163 CODEN: PNASA6; ISSN: 0027-8424
- PB National Academy of Sciences DT
- Journal
- LA English
- L30 ANSWER 7 OF 7 HCAPLUS COPYRIGHT 2008 ACS on STN
- ΤI Identification of an intracellular receptor for lysophosphatidic
- acid (LPA): LPA is a transcellular PPAR.gamma. agonist
- Lysophosphatidic acid (LPA) is a pluripotent lipid mediator acting through plasma membrane-associated LPAx receptors that transduce many, but not all, of its effects. We identify

peroxisome proliferator-activated receptor y ( PPAR.gamma.) as an intracellular

receptor for LPA. The transcription factor PPAR.gamma. is activated by several lipid ligands, but agonists derived from physiol.

signaling pathways are unknown. We show that LPA, but not its precursor

phosphatidic acid, displaces the drug rosiglitazone from the ligand-binding pocket of PPAR.gamma.. LPA and novel LPA analogs

we made stimulated expression of a PPAR-responsive element reporter and the endogenous PPAR.gamma.-controlled gene CD36,

and induced monocyte lipid accumulation from oxidized low-d. lipoprotein

via the CD36 scavenger receptor. The synthetic LPA analogs were effective PPAR.gamma. agonists, but were poor ones for LPA1, LPA2, or LPA3

receptor transfected cells. Transfection studies in yeast, which lack nuclear hormone and LPAx receptors, show that LPA directly activates

PPAR.gamma.. A major growth factor of serum is LPA generated by thrombin-activated platelets, and media from activated platelets

stimulated PPAR.gamma, function in transfected RAW264.7 macrophages. This function was suppressed by ectopic LPA-acyltransferase

expression. LPA is a physiol. PPAR.gamma. ligand, placing PPAR.gamma. in a signaling pathway, and PPAR.gamma. is

the first intracellular receptor identified for LPA. Moreover, LPA produced by stimulated plasma platelets activates PPAR.gamma. in nucleated cells.

- 2003:43726 HCAPLUS <<LOGINID::20080311>> AN
- DM 139:98489
- Identification of an intracellular receptor for lysophosphatidic acid (LPA): LPA is a transcellular PPAR.gamma. agonist
- McIntyre, Thomas M.; Pontsler, Aaron V.; Silva, Adriana R.; St. Hilaire, Andy; Xu, Yong; Hinshaw, Jerald C.; Zimmerman, Guy A.; Hama, Kotaro; Aoki, Junken; Arai, Hiroyuki; Prestwich, Glenn D.
- Program in Human Molecular Biology and Genetics, and Department of Medicine, University of Utah, Salt Lake City, UT, 84112-5330, USA
- Proceedings of the National Academy of Sciences of the United States of SO America (2003), 100(1), 131-136 CODEN: PNASA6; ISSN: 0027-8424
- National Academy of Sciences PR
- DT Journal

LA English

RE.CNT 45 THERE ARE 45 CITED REFERENCES AVAILABLE FOR THIS RECORD

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1938 NEOINTIMA

2352 NEOINTIMAL

5656 STENT

3386 LYSOPHOSPHATIDIC

4543306 ACTD

2675 LYSOPHOSPHATIDIC ACID

(LYSOPHOSPHATIDIC(W)ACID)

L32 9 L12 AND L20

- L32 ANSWER 1 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN
- TI Enhanced sterol response element-binding protein in postintervention restenctic blood vessels plays an important role in vascular smooth muscle proliferation
- Postintervention restenosis (PIRS) after balloon angioplasty or AB stent implantation is a limitation for these interventional procedures even with the advent of new drug-eluting stents. Sterol regulatory element-binding proteins (SREBP) are transcription factors governing cellular lipid biosynthesis and thus critical in the regulation of the lipid-rich cell membranes. PIRS following injury results partially from newly proliferating cells expressing vascular smooth muscle cell (VSMC) markers. Platelet-derived growth factor (PDGF), lysophosphatidic acid (LPA) and \alpha1-adrenergic receptor stimulation are well recognized diverse mitogens for VSMC activation in PIRS. We examined whether PDGF, LPA and  $\alpha 1$ -adrenergic receptor stimulation with phenylephrine (PE) regulate SREBP expression and subsequently, VSMC proliferation. Our results show that PDGF, LPA and PE upregulate SREBP-1 in a time- and dose-dependent manner. PDGF, LPA and PE-mediated proliferation is dependent on SREBP since inhibition of SREBP expression using targeted knockdown of the SREBP precursor SREBP activating protein (SCAP) by siRNA led to an attenuation of SREBP expression and decreased PDGF, LPA and PE induced proliferation. In two different in vivo PIRS models we found that SREBP-1 was enhanced in the injured blood vessel wall, especially within the neointima and co-localized with  $\alpha$ -smooth muscle actin pos. cells. Thus, SREBP is enhanced in the vessel wall following PIRS and is important in the regulation of pro-hyperplasia mol. signaling. SREBP inhibition may be a powerful tool to limit PIRS.
- AN 2008:26354 CAPLUS <<LOGINID::20080311>>
- TI Enhanced sterol response element-binding protein in postintervention restenctic blood vessels plays an important role in vascular smooth muscle proliferation
- AU Zhou, Rui-Hai; Pesant, Stephanie; Cohn, Heather I.; Eckhart, Andrea D. CS Eugene Feiner Laboratory of Vascular Biology and Thrombosis, Center for
- Translational Medicine, Thomas Jefferson University, Philadelphia, PA, 19107
- SO Life Sciences (2008), 82(3-4), 174-181 CODEN: LIFSAK; ISSN: 0024-3205
- PB Elsevier B.V.
- PB Elsevier DT Journal
- LA English
- L32 ANSWER 2 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN
- TI Vascular smooth muscle migration and proliferation in response to lysophosphatidic acid (LPA) is mediated by LPA receptors coupling to Ga
- AB Many G protein-coupled receptors can couple to multiple G proteins to convey their intracellular signaling cascades. The receptors for lysophosphatidic acid (LPA) possess this ability. LPA receptors are important mediators of a wide variety of biol. actions including cell migration, proliferation and survival which are processes that can all have a considerable impact on vascular smooth muscle (VSM) and blood vessels. To date, confirmation of G proteins involved has mostly relied on the inhibition of Gi-mediated signaling via pertussis toxin (PTx). We were interested in the specific involvement of LPA-Gq-mediated signaling therefore we isolated aorta VSM cells (VSMCs) from transgenic mice that express a peptide inhibitor of Gq, GqI, exclusively in VSM. We detected both LPA1 and LPA2 receptor expression in mouse VSM whereas LPA1 and LPA3 were expressed in rat VSM. SM22-GqI did

not alter LPA-induced migration but it was sufficient to attenuate LPA-induced proliferation. GqI expression also attenuated LPA-induced ERK1/2 and Akt activation by 40-50%. To test the feasibility of this peptide as a potential therapeutic agent, we also generated adenovirus encoding the GqI. Transient expression of GqI was capable of inhibiting both LPA-induced migration and proliferation of VSMCs isolated from rat and mouse. Furthermore, ERK activation in response to LPA was also attenuated in VSMCs with Adv-GqI. Therefore, LPA receptors couple to Gq in VSMC and mediate migration and proliferation which may be mediated through activation of ERK1/2 and Akt. Our data also suggest that both chronic and transient expression of the GqI peptide is an effective strategy to lower Gq-mediated LPA signaling and may be a successful therapeutic strategy to combat diseases with enhanced VSM growth such as occurs following angioplasty or stent implantation.

- AN 2006:847306 CAPLUS <<LOGINID::20080311>>
- DN 145:502708
- TI Vascular smooth muscle migration and proliferation in response to lysophosphatidic acid (LPA) is mediated by LPA receptors coupling to 6g.
- AU Kim, Jihee; Keys, Janelle R.; Eckhart, Andrea D.
- CS Center for Translational Medicine, Thomas Jefferson University, Philadelphia, PA, 19107, USA
- SO Cellular Signalling (2006), 18(10), 1695-1701 CODEN: CESIEY: ISSN: 0898-6568
- PB Elsevier B.V.
- DT Journal
- LA English
- RE.CNT 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L32 ANSWER 3 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN
- TI 3-D Database Searching for the Identification of Novel LPA1 Antagonists
- AB Lysophosphatidic acid (LPA) is a phospholipid growth

factor which is involved in various biol, signaling pathways. Though once thought to have only structural functions, the involvement of LPA in biol. signaling is now clear. LPA influences cell differentiation, survival and motility. LPA can initiate neointima formation, which may lead to cardiovascular disease. LPA is known to be an agonist of four cell-surface G protein coupled receptors (GPCR), LPA 1-4 and one nuclear receptor, the peroxisome proliferator activated receptor gamma (PPARα). A pharmacophore model, representing the min. structural elements necessary to define an antagonist for the LPA1 receptor, has been developed and utilized for searching the National Cancer Institute 3-D database. Approx. 250 compds., which resulted as hits from these searches, have been docked into the LPA1 receptor model. Six compds. which formed promising complexes with the receptor have been tested for antagonist activity. Of these, three showed weak agonism of the LPA1 receptor and two showed antagonism of LPA3 with micromolar potency. Ten addnl. compds. have been requested from NCI for testing purposes. Results from these studies will assist in further refining the LPA1 receptor model and in identifying novel structures as therapeutic leads.

- AN 2005:1224719 CAPLUS <<LOGINID::20080311>>
- TI 3-D Database Searching for the Identification of Novel LPA1 Antagonists
- AU Perygin, Donna H.
- CS Chemistry, University of Memphis, Memphis, TN, 38152, USA
  - O Abstracts, 57th Southeast/61st Southwest Joint Regional Meeting of the American Chemical Society, Memphis, TN, United States, November 1-4 (2005), NOV04-029 Publisher: American Chemical Society, Washington, D. C. CODEN: 69HOKM
- DT Conference; Meeting Abstract
- LA English

L32 ANSWER 4 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN

High-throughput Screening for LPA3 Antagonist Selectivity

AB Lysophosphatidic acid(LPA) activates various

extracellular and intracellular responses, such as cell proliferation, migration, adhesion, survival, and differentiation. LPA produces theses responses by acting as an agonist for three G-protein coupled receptors(GPCR), LPA. LPA responses are involved in numerous diseases such as prostate cancer, breast cancer, and cardiovascular disease. One area of interest to our group is LPA's role in cardiovascular disease. LPA is one of the culprits responsible for cardiovascular disease. In cardiovascular disease, LPA stimulates platelets and formation of neointima. LPA is involved in plaque rupture and thrombus formation. LPA1 and LPA3 antagonists both inhibit platelet shape change. Identification of selective LPA3 antagonists has the potential to aid the development of new leads for further understanding LPA's role in disease. In our current study we have developed a pharmacophore model based on known LPA3 antagonists that can be used to rapidly screen a database for structurally distinct lead compds. These potential hits can then be studied computationally as well as exptl. Computationally the database hits are rigidly docked; they are then qual, analyzed for potential as new leads. Several non-lipid antagonists with sub-micromolar potency have been identified.

2005:1224688 CAPLUS <<LOGINID::20080311>> AN

High-throughput Screening for LPA3 Antagonist Selectivity

AU Fells, James, Sr.; Parrill, Abby L.

CS Department of Chemistry, University of Memphis, Memphis, TN, 38152-3550,

SO Abstracts, 57th Southeast/61st Southwest Joint Regional Meeting of the American Chemical Society, Memphis, TN, United States, November 1-4 (2005), NOV04-004 Publisher: American Chemical Society, Washington, D. C. CODEN: 69HOKM

Conference; Meeting Abstract

LA English

L32 ANSWER 5 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN

ΤI Lysophospholipid receptors

AB A review. The lysophospholipids (LPLs) include lysophosphatidic acid (radyl-lyso-glycerophosphate), 2,3-cyclic phosphatidic acid, 1-alkv1-2-acetv1-glycero-3-phosphate, sphingosine 1-phosphate, dihydro-sphingosine-1-phosphate, sphingosylphosphorylcholine (lysosphingomyelin), and lysophosphatidylcholine. LPLs exert many of their biol. effects through specific plasma membrane and/or intracellular receptors. LPLs are abundantly present in biol. fluids and many of them are generated through stimulus-coupled activation of biochem. pathways. With only very few exceptions (e.g. RH7777 hepatoma, Sf9 insect, and Saccharomyces cerevisiae cells), most cells are responsive to one or more LPLs, indicating a widespread expression of their receptors. LPLs promote cell survival, exert mitogenic/antimitogenic regulation of the cell cycle, affect cell shape and enhance/inhibit cell motility, regulate organotypic differentiation, modulate immunol. responses, and regulate Ca2+ homeostasis. In a pathol. context, LPLs have been shown to play a role in tumor cell invasion, angiogenesis, neointima formation, development of the heart ventricles, chemotherapeutic and radiation resistance, facial dysmorphism, nociception, and suckling behavior. The current understanding of lysophospholipid biol. is very limited and the

present understanding of their role in disease is rudimentary.

2005:103923 CAPLUS <<LOGINID::20080311>> AN

DN 143:21510

ΤТ Lysophospholipid receptors

AU Tigyi, Gabor J.

- CS University of Tennessee Health Sciences Center, Memphis, TN, USA SO Encyclopedia of Biological Chemistry (2004), Volume 2, 602-604. Editor(s): Lennarz, William J.; Lane, M. Daniel. Publisher: Elsevier Ltd., 0xford, UK.
  - CODEN: 69GLBX: ISBN: 0-12-443710-9
- DT Conference; General Review
- LA English
- RE.CNT 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD
  ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L32 ANSWER 6 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN
- TI Lysophosphatidic acid analogs and inhibition of
- neointima formation
- AB The phospholipid growth factor lysophosphatidic acids (LPAs) containing unsatd. fatty acids (18:1, 18:2 and 20:4) and fatty alcs. containing hydrocarbon chains with more than 4 carbons were capable of inducing a rapid formation of neointima, an initial step in the development of atherosclerotic plaque. LPAs with saturated fatty acids did not induce neointima formation. A Peroxisome Proliferator-Activated Receptors gamma (PPARy)-specific agonist Rosiglitasone also induced a profound formation of neointima. GW9662, a selective and irreversible antagonist of PPARy, abolished LPA- and Rosiglitazone-induced neointima formation, indicating that LPA-induced neointima formation requires the activation of PPARy. These data suggest that LPA analogs that bind to but do not activate downstream signaling of PPARy or antagonists of PPARy that inhibit PPARy signaling would be useful in the prevention and/or treatment of neointima formation and atherosclerosis.
- AN 2004:857161 CAPLUS <<LOGINID::20080311>> DN 141:343506
- TI Lysophosphatidic acid analogs and inhibition of
  - neointima formation
- IN Tigyi, Gabor; Baker, Daniel L.; Zhang, Chunxiang
- PA USA
- SO U.S. Pat. Appl. Publ., 23 pp.
- CODEN: USXXCO
- DT Patent
- LA English
- FAN.CNT 1

	PATENT				KIN		DATE				ICAT					ATE		
PI	US 2004 AU 2004	20438 22946	3		A1 A1		2004 2004	1014 1028		US 2	004- 004-	8217	39		2	0040 0040	409	
	AU 2004 CA 2521 WO 2004	189			B2 A1 A2		2007 2004 2004	1028			004-					0040		
	WO 2004 W:	AL,	AM,	AT,	ΑU,	AZ,												
		GE,	GH,	GM,	HR,	HU,	DE, ID, LV,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KZ,	LC,	
		NO, TJ,	NZ, TM,	OM, TN,	PG, TR,	PH, TT,	PL, TZ,	PT, UA,	RO, UG,	RU, US,	SC, UZ,	SD, VC,	SE, VN,	SG, YU,	SK, ZA,	SL, ZM,	SY, ZW	
	RW:		KG,	KΖ,	MD,	RU,	MW, TJ, HU,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	
			TR,				CG,											
	EP 1613298 R: AT, BE, CH						2006 ES.											
							RO,											HP

JP 2007525449 T 20070906 JP 2006-509874 20040409 PRAI US 2003-462274P P 20030411 WO 2004-US11016 W 20040409

- L32 ANSWER 7 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN
- Thrombogenic and atherogenic activities of lysophosphatidic TI acid
- AB A review. Lysophosphatidic acid (LPA) has been identified as a biol. active lipid in mildly-oxidized LDL, human atherosclerotic lesions, and the supernatant of activated platelets. The evidence that LPA has thrombogenic and atherogenic activities has increased substantially in recent years. Supporting the thrombogenic activity of LPA, anal. of the core region of human carotid plaques revealed recently the presence of alkyl- and acyl-mol. species from LPA with high platelet-activating potency (16:0 alkyl-LPA, 20:4 acyl-LPA). LPA, lipid exts. of atherosclerotic plaques, and the lipid-rich core elicited shape change and, in synergy with other platelet stimuli, aggregation of isolated platelets. This effect was completely abrogated by prior incubation of platelets with LPA receptor antagonists. Furthermore, LPA at concns. approaching those found in vivo, induced platelet shape change, aggregation, and platelet-monocyte aggregate formation in blood. LPA-stimulated platelet aggregation was mediated by the ADP-stimulated activation of the P2Y1 and P2Y12 receptors. Supporting its atherogenic activity, LPA is a mitogen and motogen to vascular smooth muscle cells (VSMCs) and an activator of endothelial cells and macrophages. Recently, LPA has been identified as an agonist of the peroxisome proliferator activating receptor  $\gamma(PPAR\gamma)$ , which is a key regulator of atherogenesis. LPA elicits progressive neointima formation, which is fully abolished by GW9662, an antagonist of PPARy. We propose that LPA plays a central role in eliciting vascular remodeling and atherogenesis. Furthermore, upon rupture of lipid-rich atherosclerotic plaques, LPA may trigger platelet aggregation and intra-arterial thrombus formation. Antagonists of LPA receptors might be useful in preventing LPA-elicited thrombus formation and neointima formation in patients with cardiovascular diseases
  - 2004:654161 CAPLUS <<LOGINID::20080311>>
- DN 141:171305

AN

- ΤI Thrombogenic and atherogenic activities of lysophosphatidic
- AU Siess, Wolfgang; Tigvi, Gabor
- CS Institute for Prevention of Cardiovascular Diseases, University of Munich,
- SO Journal of Cellular Biochemistry (2004), 92(6), 1086-1094 CODEN: JCEBD5; ISSN: 0730-2312
- PB Wilev-Liss, Inc.
- DT Journal: General Review
- LA English
- RE.CNT 46 THERE ARE 46 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L32 ANSWER 8 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN
- Lysophosphatidic acid induces neointima
- formation through PPARy activation
- Neointimal lesions are characterized by accumulation of cells within the arterial wall and are a prelude to atherosclerotic disease. Here the authors report that a brief exposure to either alkyl ether analogs of the growth factor-like phospholipid lysophosphatidic acid (LPA), products generated during the oxidative modification of low d. lipoprotein, or to unsatd. acyl forms of LPA induce progressive formation of neointima in vivo in a rat carotid artery model.

This effect is completely inhibited by the peroxisome proliferatoractivated receptor (PPAR)y antagonist GW9662 and mimicked by PPARy agonists Rosiglitazone and 1-0-hexadecv1-2azeleoylphosphatidylcholine. In contrast, stearoyloxovalerylphosphatidylc holine, a PPARa agonist and the polypeptides epidermal growth factor, platelet-derived growth factor, and vascular endothelial growth factor failed to elicit neointima. The structure-activity relation for neointima induction by LPA analogs in vivo is identical to that of PPARy activation in vitro and disparate from that of LPA G protein-coupled receptor activation. Neointima -inducing LPA analogs up-regulated the CD36 scavenger receptor in vitro and in vivo and elicited dedifferentiation of cultured vascular smooth muscle cells that was prevented by GW9662. These results suggest that selected LPA analogs are important novel endogenous PPARy ligands capable of mediating vascular remodeling and that activation of the nuclear transcription factor PPARy is both necessary and sufficient for neointima formation by components of oxidized low d. lipoprotein.

- AN 2004:242383 CAPLUS <<LOGINID::20080311>>
- DN 140:373126
- TI Lysophosphatidic acid induces neointima
  - formation through PPARy activation
- AU Zhang, Chunxiang; Baker, Daniel L.; Yasuda, Satoshi; Makarova, Natalia; Balazs, Louisa; Johnson, Leonard R.; Marathe, Gopal K.; McIntyre, Thomas M.; Xu, Yong; Prestwich, Glenn D.; Byun, Hoe-Sup; Bittman, Robert; Tigyi, Gabor
- CS Vascular Biology Center of Excellence, The University of Tennessee Health Science Center, Memphis, TN, 38163, USA
- SO Journal of Experimental Medicine (2004), 199(6), 763-774
- CODEN: JEMEAV; ISSN: 0022-1007
- PB Rockefeller University Press DT Journal
- LA English
- RE.CNT 53 THERE ARE 53 CITED REFERENCES AVAILABLE FOR THIS RECORD
  ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L32 ANSWER 9 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN
- TI Athero- and thrombogenic actions of lysophosphatidic acid and sphingosine-1-phosphate
- AB A review. Lysophosphatidic acid (LPA) and
  - sphingosine-1-phosphate (S1P) are potent bioactive phospholipids with specific and multiple effects on blood cells and cells of the vessel wall. Released by activated platelets, LPA and S1P mediate physiol. wound healing processes such as vascular repair. Evidence is accumulating that these lipid mediators can, however, under certain conditions become athero- and thrombogenic mols. that might aggravate cardiovascular disease. For example, LPA present in minimally modified LDL and within the intima of atherosclerotic lesions may play a role in the early phase of atherosclerosis by inducing barrier dysfunction and increased monocyte adhesion of the endothelium, as well as in the late phase by triggering platelet activation and intra-arterial thrombus formation upon rupture of the atherosclerotic plaque. Moreover, LPA and S1P, by stimulating the proliferation of fibroblasts and by enhancing the survival of inflammatory cells are likely to play a central role in the excessive fibroproliferative and inflammatory response to vascular injury that characterizes the progression of atherosclerosis. Furthermore, LPA can cause the phenotypic dedifferentiation of medial vascular smooth muscle cells, and S1P is able to stimulate the migration and proliferation of intimal vascular smooth muscle cells; both processes ultimately lead to the formation of the neointima. Most importantly, as LPA and S1P bind to and activate multiple G-protein receptors, it emerges that the

beneficial or harmful action of LPA and SIP are critically dependent on the expression profile of their receptor subtypes and their coupling to different signal transduction pathways in the target cells. By targeting specific subtypes of LPA and SIP receptors in selective cells of the vascular wall and blood, new strategies for the prevention and therapy of cardiovascular diseases can be envisioned.

- AN 2002:459264 CAPLUS <<LOGINID::20080311>>
- DN 137:199092 TI Athero- and the
  - II Athero- and thrombogenic actions of lysophosphatidic
  - acid and sphingosine-1-phosphate
- AU Siess, Wolfgang
- CS Medical Faculty, Institute for Prevention of Cardiovascular Diseases, University of Munich, Munich, D-80336, Germany
- SO Biochimica et Biophysica Acta, Molecular and Cell Biology of Lipids (2002), 1582(1-3), 204-215 COODN: BBMLFG; ISSN: 1388-1981
- PB Elsevier B.V.
- DT Journal; General Review
- LA English
- RE.CNT 160 THERE ARE 160 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

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L17 ANSWER 1 OF 15 HCAPLUS COPYRIGHT 2008 ACS on STN
TI Preparation of pyridinyl ureas as urotensin II antagonists

GI

Title compds. I [wherein Py = pyridin-4-y1 disubstituted in positions 2 AB and 6; X = aryl, arylalkyl, aryloxy, etc.; A = (CH2)n; XCZ form an exocyclic bond which bears an Ar group and the just formed CH2 group; Z = H; when X = aryl or arylalkyl, Z = H, OH, CO2H, etc.; when X = aryl, arylakyl and n = 0, Z = H, OH, CO2H, aryl, etc.; Y = CR6R7(CH2)m, (CH2) mCR6R7; m = 1-2; n = 0-1; R6 = H, alkyl, aryl, arylalkyl; or R6CR7 = carbocycle; R7 = H, Me; and their enantiomers, diastereomers, racemates, pharmaceutically acceptable salts, solvate complexes, and morphol. forms thereof] were prepared as neurohormonal antagonists. For example, reacting 2-(4-benzylpiperidino)-1-ethanamine with 1,3-Bis(2,6-dimethylpyridin-4yl)urea gave II. In binding assays of human [1251]-urotensin II to human-derived TE-671 rhabdomyosarcoma cells, compds. of the invention showed activity with IC50 values ranging from 0.1 nM to 1000 nM. Thus, I and their pharmaceutical compns., optionally comprising other pharmacol. active compds., are useful for treating a variety of disorders associated with dysregulation of urotensin II, such as heart disease, hypertension, kidney disease, diabetes, asthma, and pulmonary disease (no data). AN 2005:303504 HCAPLUS <<LOGINID::20080311>>

II

DN 142:355172

TI Preparation of pyridinyl ureas as urotensin II antagonists

IN Mathys, Boris; Mueller, Claus; Scherz, Michael; Weller, Thomas; Clozel, Martine; Velker, Joerg; Bur, Daniel

PA Actelion Pharmaceuticals Ltd., Switz.

SO PCT Int. Appl., 113 pp.

CODEN: PIXXD2 DT Patent

LA English FAN.CNT 1

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     WO 2004-EP10559
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                                20040921
     MARPAT 142:355172
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RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L17 ANSWER 2 OF 15 HCAPLUS COPYRIGHT 2008 ACS on STN
- TI Preparation of novel piperidine derivatives as urotensin II antagonists

AB The invention relates to novel piperidine derivs. I [Py = substituted pyridin-4-yl, (un)substituted quinolin-4-yl, X = CONR3R4; R1, R2 = H, alkyl, arylalkyl; R3, R4 = H, alkyl, aryl, etc.; or NR3R4 = pyrrolidine, piperidine, morpholine] and their use as as neurohormonal antagonists, in

particular their use as urotensin II antagonists. The multi-step synthesis of the urea II (no characterization data for intermediates), was provided. The compds. I were found to have IC50 values ranging from 10 to 1000 nM in the assay for evaluating inhibition of human [1251]-urotensin II binding to a rhabdomyosarcoma cell line. The pharmaceutical compns. containing one or more of those compds. I are disclosed.

AN 2004:996155 HCAPLUS <<LOGINID::20080311>>

DN 141:424119 TI Preparation of novel piperidine derivatives as urotensin II antagonists

IN Aissaoui, Hamed; Binkert, Christoph; Clozel, Martine; Mathys, Boris; Mueller, Claus; Nayler, Oliver; Scherz, Michael; Verker, Jorg; Weller,

PA Actelion Pharmaceuticals Ltd., Switz.

SO PCT Int. Appl., 32 pp.

CODEN: PIXXD2

DТ Patent

English T.A FAN CNT 1

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ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L17 ANSWER 3 OF 15 HCAPLUS COPYRIGHT 2008 ACS on STN
- Lysophosphatidic acid analogs and inhibition of neointima TI formation
- The phospholipid growth factor lysophosphatidic acids (LPAs) containing AB unsatd. fatty acids (18:1, 18:2 and 20:4) and fatty alcs. containing hydrocarbon chains with more than 4 carbons were capable of inducing a rapid formation of neointima, an initial step in the development of atherosclerotic plaque. LPAs with saturated fatty acids did not induce neointima formation. A Peroxisome Proliferator-Activated Receptors gamma (PPAR.gamma.)-specific agonist Rosiglitasone also induced a profound formation of neointima. GW9662, a selective and irreversible antagonist of PPAR.gamma., abolished LPA- and Rosiglitazone-induced neointima formation, indicating that LPA-induced neointima formation requires the activation of PPAR.gamma.. These data suggest that LPA analogs that bind to but

do not activate downstream signaling of PPAR.gamma. or antagonists of PPAR.gamma. that inhibit PPAR.gamma. signaling would be useful in the prevention and/or treatment of neointima formation and atherosclerosis.

AN 2004:857161 HCAPLUS <<LOGINID::20080311>>

DN 141:343506

TI Lysophosphatidic acid analogs and inhibition of neointima formation

IN Tigvi, Gabor; Baker, Daniel L.; Zhang, Chunxiang

PA USA SO U.S. Pat. Appl. Publ., 23 pp.

CODEN: USXXCO

DT Patent

LA English

FAN.CNT 1

FAN.	FAN.CNT 1							DATE			APPL						ATE		
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PRAI	IE, SI, JP 2007525449 I US 2003-462274P WO 2004-US11016				T P		2007	0906 0411		JP 2									

L17 ANSWER 4 OF 15 HCAPLUS COPYRIGHT 2008 ACS on STN

TI Preparation of ascochlorin-amino acids Schiff bases or its analogs as novel transcriptional factor and process for producing the same and use thereof

[R1 = 0, 01; R2 = (CH2)nCHR5R6; n = 0-6; R5 = H, NH2, mono- or di(C1-6 alkyl)amino, phenyl-C1-6 alkyl; R6 = CO2H, CONH2, (un)substituted C1-6 alkoxycarbonyl; R3, R4 = H, each (un)substituted C1-6 alkyl, C2-6 alkenyl, C2-6 alkynyl, or C3-8 cycloalkyl, acyl, aryl, CO2H] are synthesized by mixing and reacting ascochlorin, its analogs or its derivs. (II; R1-R3 = same as above) with amino acids having a primary amino group of formula R5R6CH(CH2)nNH2 (R5, R6 = same as above) in the presence/absence of a basic catalyst. The novel imino compds. I thus synthesized are ligands which activate nuclear receptor superfamily such as retinoid orphan receptor (RXR), peroxisome proliferator activated receptor (PPAR) and steroid receptor (PXR) and show an effect of promoting the transcription of a drug-metabolizing enzyme CYP7A1. They have therapeutic effects on diseases such as life style-related diseases, diabetes, arteriosclerosis, multiple risk factor syndrome, myxedema, hypertension, or chronic inflammation. They are useful for the preventives and/or therapeutic agents for restenosis of arterial cavity enlarged by balloon catheter or stent or as serum cholesterol-lowering agents or adhesion promoters for adhering transplanted cells or tissues derived by differentiated induction of stem cells in a recipient. Thus, when a feed containing 0.025-0.1% compound (III) was fed to obese diabetic mice for 20 days,

Novel imino compds., i.e. 3-prenvlbenzaldehyde-amino acid Schiff base (I)

the excretion of sugar in urine was effectively reduced.

- AN 2004:718503 HCAPLUS <<LOGINID::20080311>>
- DN 141:225837
- TI Preparation of ascochlorin-amino acids Schiff bases or its analogs as novel transcriptional factor and process for producing the same and use thereof
- IN Kitahara, Takeshi; Watanabe, Hidenori; Ando, Kunio
- PA NRL Pharma, Inc., Japan
- SO PCT Int. Appl., 64 pp.
- CODEN: PIXXD2
- DT Patent
- LA Japanese
- FAN.CNT 1
- PATENT NO. KIND DATE APPLICATION NO. DATE

  PI WO 2004074236 A1 20040902 WO 2004-JP2110 20040224 <-W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,

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     WO 2004-JP2110
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              THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE.CNT 5
              ALL CITATIONS AVAILABLE IN THE RE FORMAT
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- L17 ANSWER 5 OF 15 HCAPLUS COPYRIGHT 2008 ACS on STN
- TI Endovascular implants especially stents that are coated with a combination of PPAR-agonists and RXR-agonists
- AB The invention concerns endo-vascular implants especially stents that are coated at least partially with a combination of PPAR-agonists and RXR-agonists; the drugs can be incorporated in a carrier selected from the group of polylactide, poly-L-lactide or hyaluronic acid. The drugs are applied to treat and prevent stenosis and restenosis. Thus a com. stent (Lekton) was mounted onto a rotary atomizer; the fluid reservoir was filled with poly-l-lactide (Resomer L214) and clofibrate in chloroform. Coating was performed while the stent was rotated and the polylactide-clofibrate solution was sprayed periodically to allow time for solvent evaporation; both sides of the stent were sprayed in an 80 cycle process with 10 s spraying and 12 s dying. The stents were implanted in swine.
- AN 2004:136474 HCAPLUS <<LOGINID::20080311>>
- DN 140:169740
- TI Endovascular implants especially stents that are coated with a combination of PPAR-agonists and RXR-agonists
- IN Rohde, Roland; Sternberg, Katrin; Diener, Tobias
- PA Biotronik Mess- und Therapiegeraete GmbH & Co. Ingenieurbuero Berlin, Germany
- SO Eur. Pat. Appl., 11 pp.
- CODEN: EPXXDW
- DT Patent
- LA German
- FAN.CNT 1

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- L17 ANSWER 6 OF 15 HCAPLUS COPYRIGHT 2008 ACS on STN
- TI The association of Prol2Ala polymorphism in PPAR.gamma.2 with lower carotid artery IMT in Japanese
- AB In this study, the association of the Prol2Ala peroxisome proliferator-activated receptor γ2 (
  PPAR.gamma.2) polymorphism with atherosclerosis was examined in a Japanese type 2 diabetic population. PPAR.gamma. has been

identified as a key regulator of adipogenesis. Recently, some studies reported that the Prol2Ala polymorphism was associated with resistance to Type 2 diabetes. It is well-known that Type 2 diabetes is closely related with disorder of lipid metabolism as well as impaired glucose homeostasis, resulting in atherosclerosis. We aimed to evaluate the association between carriers of the Pro12Ala PPAR.gamma.2 mutation and clin. profiles concerning atherosclerosis besides plasma glucose and lipid concns. Screening for the mutation was performed using the PCR -restriction fragment length polymorphism (PCR-RFLP) method among 154 type 2 diabetic patients. The homozygotes of the Pro12 allele were 143 (93%), the heterozygotes of the Pro12 and Ala12 allele were 11 (7%) and the homozygote of the Alal2 allele was not detected. The group with the Alal2 allele had a significantly lower value of carotid artery intima-media thickness (IMT) than that without it, although there was no difference between 2 groups in sex, age or other clin. variables the authors examined The Pro12Ala PPAR.gamma.2 polymorphism may be associated with carotid artery IMT values in type 2 diabetes mellitus.

2003:850595 HCAPLUS <<LOGINID::20080311>> AN

DN 140:126350

ΤI The association of Pro12Ala polymorphism in PPAR.gamma.2 with lower carotid artery IMT in Japanese

- ΑU Iwata, E.; Yamamoto, I.; Motomura, T.; Tsubakimori, S.; Nohnen, S.; Ohmoto, M.; Igarashi, T.; Azuma, J.
- CS Graduate School of Pharmaceutical Sciences, Department of Clinical Evaluation of Medicines and Therapeutics, Osaka University, 1-6 Yamadagoka, Suita, Osaka, 565-0871, Japan
- Diabetes Research and Clinical Practice (2003), 62(1), 55-59 SO CODEN: DRCPE9; ISSN: 0168-8227
- PB Elsevier Science B.V.
- DT Journal English LA
- RE.CNT 10
- THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L17 ANSWER 7 OF 15 HCAPLUS COPYRIGHT 2008 ACS on STN
- ΤI Peroxisome proliferator-activated
- receptor gamma ligand eluting medical device
- AB Implantable medical devices having an anti-restenotic coatings of peroxisome proliferator-activated receptor y ( PPAR.gamma.) agonists are disclosed.

The anti-restenotic PPAR.gamma, ligands include thiazolidinedione compds. including ciglitazone. The anti-restenotic medial devices include stents, catheters, micro-particles, probes and vascular grafts. The medical devices can be coated using any method known in the art including compounding the thiazolidinedione with a biocompatible polymer prior to applying the coating. Addnl., medical devices having a coating comprising at least one thiazolidinedione in combination with at least one addnl. therapeutic agent, such as an antiplatelet, antifibrotic, or anti-inflammatory agent, are also described. For example, a stainless steel stent was coated using a drug/polymer system. Ciglitazone (250 mg) was dissolved in THF and 251.6 mg of polycaprolactone (PCL) was added and mixed until the PCL dissolved forming a drug/polymer solution The cleaned, dried stents were coated using either spraying techniques or dipped into the drug/polymer solution to achieve a final coating weight of between approx. 10 µg to 1 mg. Finally, the coated stents were dried in a vacuum oven at 50° over night.

AN 2002:671834 HCAPLUS <<LOGINID::20080311>>

DN 137:206601

ΤТ Peroxisome proliferator-activated

receptor gamma ligand eluting medical device

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TNI
    Carlyle, Wenda; Cheng, Peiwen; Cafferata, Robert L.
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PA Medtronic Ave, Inc., USA

SO Eur. Pat. Appl., 21 pp. CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE A1 20020904 EP 2002-251370 EP 1236478 EP 1236478 20020227 <--B1 20051026 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR US 2002127263 A1 20020912 US 2002-85539 20020226 <--AT 307622 т 20051115 AT 2002-251370 20020227 <--A1 20060419 EP 2005-18140 EP 1647289 20020227 <--R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR P PRAI US 2001-271898P 20010227 <--EP 2002-251370 A3 20020227 <--

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

## L17 ANSWER 8 OF 15 HCAPLUS COPYRIGHT 2008 ACS on STN

- Intimal smooth muscle cells as a target for peroxisome proliferator-activated receptor-y ligand
- therapy AB Activation of the nuclear receptor/transcription factor, peroxisome proliferator-activated

receptor y ( PPAR.gamma.), is a newly defined

target for limiting vascular pathologies. PPAR.gamma. is

expressed in human and animal models of vascular disease, with

particularly high levels being present in the cells of the neointimal microenvironment. In the present study, we show that

intimal smooth muscle cells in vitro contain higher amts. of functional PPAR.gamma. than medial smooth muscle cells. The PPAR

γ ligand rosiglitazone more potently induced CD36 expression at low concns., and cell death by apoptosis at higher concns. in intimal compared with medial smooth muscle cells. Intimal smooth muscle cells also

contained high levels of cyclooxygenase-2 protein, and released a more diverse and larger amount of eicosanoids on arachidonic acid stimulation.

Furthermore, when exogenous arachidonic acid was added, PPAR reporter gene activation was induced in a cyclooxygenase

inhibitor-sensitive manner, an effect that correlated with an increase in

CD36 expression. In summary, intimal smooth muscle cells contain functionally higher levels of PPAR.gamma., PPAR.gamma.

ligands have high- and low-potency targets in vascular smooth muscle cells, and cyclooxygenase can serve as a source of potential endogenous

PPAR ligands. Intimal vascular smooth muscle cells therefore represent a potentially important target for the antiproliferative, and antiatherosclerotic actions of PPAR.gamma. ligands.

AN 2002:629069 HCAPLUS <<LOGINID::20080311>>

DN 138:198356

- Intimal smooth muscle cells as a target for peroxisome proliferator-activated receptor-v ligand therapy
- AU Bishop-Bailey, David; Hla, Timothy; Warner, Timothy D.
- CS Department of Cardiac, Vascular Research, William Harvey Research Institute, Barts and the London, Queen Mary University of London, London, EC1 M 6BQ, UK
- SO Circulation Research (2002), 91(3), 210-217

CODEN: CIRUAL; ISSN: 0009-7330

- PB Lippincott Williams & Wilkins
- DT Journal
- LA English
- RE.CNT 52 THERE ARE 52 CITED REFERENCES AVAILABLE FOR THIS RECORD
  ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L17 ANSWER 9 OF 15 HCAPLUS COPYRIGHT 2008 ACS on STN
- TI PPAR.gamma. ligand inhibits osteopontin gene expression through interference with binding of nuclear factors to A/T-rich sequence in THP-1 cells
- AB Peroxisome proliferator-activated

receptor y( PPAR.gamma.) is a member of the nuclear receptor superfamily that acts as a key player in adipocyte differentiation, glucose metabolism, and macrophage differentiation. Osteopontin (OPN) a component of extracellular matrix, is elevated during neointimal formation in the vessel wall and is synthesized by macrophages in atherosclerotic plaques. In the present study, we investigated the mol. mechanisms regulating OPN gene expression by PPAR.gamma. in THP-1 cells, a cell line derived from human monocytic leukemia cells. Northern and Western blot analyses showed that exposure of THP-1 cells to PMA (phorbol 12-myristate 13-acetate) increases OPN mRNA and protein levels in a time-dependent manner. PMA-induced OPN expression was significantly decreased by troglitazone (Tro) and other PPAR.gamma. ligands. Transient transfection assays of the human OPN promoter/luciferase construct showed that PPARy represses OPN promoter activity, and the PPAR.gamma.-responsive region within the OPN promoter lies between -1000 and -970 relative to the transcription start site. Site-specific mutation anal. and electrophoretic mobility shift assays indicated that a homeobox-like A/T-rich sequence between -990 and 981, which functions as a binding site for PMA-induced nuclear factors other than PPAR.gamma., mediates the repression of OPN expression by Tro. Furthermore, concatenated A/T-rich sequences conferred the PPAR.gamma. responsiveness on the heterologous promoter. Taken together, these data suggest that PPAR.gamma. ligand

- nuclear factors to A/T-rich sequence in THP-1 cells. AN 2002:162012 HCAPLUS <<LOGINID::20080311>>
- DN 136:338695
  - I PPAR.gamma. ligand inhibits osteopontin gene expression through
  - interference with binding of nuclear factors to A/T-rich sequence in THP-1 cells

    U Ovama, Yuko; Akuzawa, Nobuhiro; Naqai, Ryozo; Kurabayashi, Masahiko

inhibits OPN gene expression through the interference with the binding of

- AU Oyama, Yuko; Akuzawa, Nobuhiro; Nagai, Ryozo; Kurabayashi, Masahik CS Second Department of Internal Medicine, Gunma University School of
- Medicine, Maebashl, 371-8511, Japan SO Circulation Research (2002), 90(3), 348-355
- CODEN: CIRUAL; ISSN: 0009-7330 PB Lippincott Williams & Wilkins
- DT Journal
- LA English
- RE.CNT 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L17 ANSWER 10 OF 15 HCAPLUS COPYRIGHT 2008 ACS on STN
- TI Peroxisome proliferator-activated
  - receptor  $\gamma$  inhibits transforming growth factor  $\beta$ -induced connective tissue growth factor expression in human aortic smooth muscle cells by interfering with Smad3
- AB Activation of peroxisome proliferatoractivated receptor γ (PPAR.gamma.) after balloon injury significantly inhibits VSMC proliferation and

neointima formation. However, the precise mechanisms of this inhibition have not been determined. The authors hypothesized that activation of PPAR.gamma. in vascular injury could attenuate VSMC growth and matrix production during vascular lesion formation. Since connective tissue growth factor (CTGF) is a key factor regulating extracellular matrix production, abrogation of transforming growth factor β (TGF-β)-induced CTGF production by PPAR.gamma. activation may be one of the mechanisms through which PPAR.gamma. agonists inhibit neointima formation after vascular injury. In this study, the authors demonstrate that the PPAR.gamma, natural ligand (15-deoxyprostaglandin J2) and a synthetic ligand (GW7845) significantly inhibit TGF-β-induced CTGF production in a dose-dependent manner in HASMCs. In addition, suppression of CTGF mRNA expression is relieved by pretreatment with an antagonist of PPAR.gamma. (GW9662), suggesting that the inhibition of CTGF expression is mediated by PPAR.gamma.. To elucidate further the mol. mechanism by which PPAR.gamma. inhibits CTGF expression, an .apprx.2-kilobase pair CTGF promoter was cloned. The authors found that PPAR.gamma. activation inhibits TGF-B-induced CTGF promoter activity in a dose-dependent manner, and suppression of CTGF promoter activity by PPAR.gamma. activation is completely rescued by overexpression of Smad3, but not by Smad4. Furthermore, PPAR.gamma. phys. interacts with Smad3 but not Smad4 in vitro in glutathione S-transferase pull-down expts. Taken together, the data suggest that PPAR γ inhibits TGF-β-induced CTGF expression in HASMCs by directly interfering with the Smad3 signaling pathway.

AN 2001:908512 HCAPLUS <<LOGINID::20080311>> DN 136:198017

TI Peroxisome proliferator-activated

receptor  $\gamma$  inhibits transforming growth factor  $\beta$ -induced connective tissue growth factor expression in human aortic

smooth muscle cells by interfering with Smad3 AU Fu, Mingui; Zhang, Jifeng; Zhu, Xiaojun; Myles, David E.; Willson, Timothy M.; Liu, Xuedong; Chen, Yuding E.

M.; Llu, Xuedong; Chen, Yuqing E. C Cardiovascular Research Institute, Morehouse School of Medicine, Atlanta, GA. 30310. USA

SO Journal of Biological Chemistry (2001), 276(49), 45888-45894 CODEN: JBCHA3; ISSN: 0021-9258

PB American Society for Biochemistry and Molecular Biology

DT Journal

LA English

RE.CNT 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 11 OF 15 HCAPLUS COPYRIGHT 2008 ACS on STN

TI Pioglitazone enhances cytokine-induced apoptosis in vascular smooth muscle cells and reduces intimal hyperplasia AB Cytokines induce apoptosis in vascular disease lesions through enhancement

of inducible NO synthase (iNOS) activation. The thiazolidinediones, novel

insulin-sensitizing agents, were demonstrated to modulate cytokine-induced NO production The authors have investigated the role of pioglitazone in the apoptosis of vascular smooth muscle cells (VSMCs) in vitro and developed intimal hyperplasia in vivo. Pioglitazone (0.1 to 10  $\mu mol/L$ ) significantly enhanced cytokine-induced expression of inOS and NO production in a dose-dependent manner in rat VSMCs, but 15-deoxy-A12,14-prostaglandin J2 ( $\leq$  10  $\mu mol/L$ ), a native peroxisome proliferator-activated receptor-Y ligand, showed no effect. Pioglitazone also significantly enhanced reduction of cell viability, as evidenced by the increase in the number of TUNEL-pos.

cells. All of these effects of pioglitazone were blocked by treatment with N-monomethyl-L-Arg, an NO synthesis inhibitor. In an in vivo study

with a balloon-injured rat carotid artery, neointimal thickness had reached maximum levels at 2 wk after injury. Then, rats were fed with or without pioglitazone (3 mg · kg-1 · d-1) for an addnl. week. The ratio of intima to media area of carotid artery was significantly decreased by 30%, and the ratio of apoptotic cells in neointima was significantly increased in pioglitazone-treated rats compared with vehicle-treated control rats. Pioglitazone enhanced apoptosic in an NO-dependent manner in cytokine-activated VSMCs and induced significant regression of intimal hyperplasia in balloon-injured rat carotid artery. It appears that pioglitazone is a potent apoptosis inducer in vascular lesions, providing a novel pharmacol. strategy to prevent restenosis after vascular intervention.

2001:613879 HCAPLUS <<LOGINID::20080311>>

DN 136:303789

AN

- TI Pioglitazone enhances cytokine-induced apoptosis in vascular smooth muscle cells and reduces intimal hyperplasia
  AU Alzawa, Yoshiaki: Kawahe, Jun-ichi: Hasehe, Naoyuki: Takehara, Naohumi:
- AU Aizawa, Yoshiaki; Kawabe, Jun-ichi; Hasebe, Naoyuki; Takehara, Naohumi; Kikuchi, Kenjiro
- CS Department of Medicine, Asahikawa Medical College, Asahikawa, Japan

SO Circulation (2001), 104(4), 455-460 CODEN: CIRCAZ; ISSN: 0009-7322

PB Lippincott Williams & Wilkins

DT Journal

LA English

RE.CNT 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 12 OF 15 HCAPLUS COPYRIGHT 2008 ACS on STN

TI Control of vascular cell proliferation and migration by PPAR -γ: A new approach to the macrovascular complications of diabetes AB A review with 82 refs. Compared with nondiabetic subjects, type 2 diabetic individuals are at an increased risk for coronary artery disease and coronary restenosis after angioplasty or stenting. Increased proliferation and migration of vascular smooth muscle cells (VSMCs) contribute importantly to the formation of both atherosclerotic and restenotic lesions. Therefore, pharmaceutical interventions targeting proteins that regulate VSMC growth or movement are a promising new approach to treat diabetes-associated cardiovascular disease. Peroxisome proliferator-activated receptor-y ( PPAR-y) is a member of the nuclear receptor superfamily that, when activated by thiazolidinedione (TZD) insulin sensitizers, regulates a host of target genes. All of the major cells in the vasculature express PPAR-y, including endothelial cells, VSMCs, and monocytes/macrophages. PPAR -γ is present in intimal macrophages and VSMCs in early human atheromas. In an animal model of vascular injury, PPAR-y levels are substantially elevated in the neointima that forms after mech. injury of the endothelium. Recent exptl. studies provide evidence that PPAR-y may function to protect the vasculature from injury. Cell culture studies have shown that TZD PPAR-y ligands inhibit both the proliferation and migration of VSMCs. These antiatherogenic activities of PPAR-γ may also occur in vivo, because TZDs inhibit lesion formation in several

vasculature indirectly by normalizing metabolic abnormalities of the diabetic milieu that increase cardiovascular risk. Activation of PPAR-y, newly defined in vascular cells, may be a useful

approach to protect the vasculature in diabetes.
AN 2001:136312 HCAPLUS <<LOGINID::20080311>>

DN 134:235155

animal models. PPAR-y ligands may also protect the

TI Control of vascular cell proliferation and migration by PPAR

-γ: A new approach to the macrovascular complications of diabetes

AU Hsueh, Willa A.; Jackson, Simon; Law, Ronald E.

- CS Department of Medicine, the Endocrinology, Diabetes, and Hypertension Division, University of California School of Medicine, Los Angeles, CA, 90095-7073, USA
- SO Diabetes Care (2001), 24(2), 392-397

CODEN: DICAD2; ISSN: 0149-5992

PB American Diabetes Association, Inc.

DT Journal; General Review

LA English

RE.CNT 82 THERE ARE 82 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 13 OF 15 HCAPLUS COPYRIGHT 2008 ACS on STN

TI Peroxisome proliferator-activated

receptor  $\gamma$  activators downregulate angiotensin II type 1

receptor in vascular smooth muscle cells
AB Peroxisome proliferator-activated

receptor γ ( PPAR.gamma.) activators, such as

troglitazone (Tro), not only improve insulin resistance but also suppress the neointimal formation after balloon injury. However, the

precise mechanisms have not been determined Angiotensin II (Ang II) plays crucial roles in the pathogenesis of atherosclerosis, hypertension, and

neointimal formation after angioplasty. The authors examined the effect of PPAR.gamma. activators on the expression of Ang II

type 1 receptor (AT1-R) in cultured vascular smooth muscle cells (VSMCs).
AT1-R mRNA and AT1-R protein levels were determined by Northern blot anal. and

radioligand binding assay, resp. Natural PPAR.gamma. ligand 15-deoxy-A12.14-prostaglandin J2, as well as Tro, reduced the AT1-R

mRNA expression and the ATI-R protein level. The PPAR.gamma.

activators also reduced the calcium response of VSMCs to Ang II. PPAR.gamma. activators suppressed the ATI-R promoter activity

measured by luciferase assay but did not affect the ATI-R mRNA stability, suggesting that the suppression occurs at the transcriptional level.

suggesting that the suppression occurs at the transcriptional level. PPAR.gamma. activators reduced the AT1-R expression and calcium response to Ang II in VSMCs. Downregulation of AT1-R may contribute to

the inhibition of neointimal formation by PPAR.gamma. activators.

AN 2000:759543 HCAPLUS <<LOGINID::20080311>>

DN 134:66617

TI Peroxisome proliferator-activated

receptor  $\gamma$  activators downregulate angiotensin II type 1 receptor in vascular smooth muscle cells

AU Takeda, Kotaro; Ichiki, Toshihiro; Tokunou, Tomotake; Funakoshi, Yuko; Iino, Naoko; Hirano, Katsuya; Kanaide, Hideo; Takeshita, Akira

CS Departments of Cardiovascular Medicine, Kyushu University Graduate School of Medical Sciences, Fukuoka, 812-8582, Japan

SO Circulation (2000), 102(15), 1834-1839

CODEN: CIRCAZ; ISSN: 0009-7322 PB Lippincott Williams & Wilkins

DT Journal

LA English

RE.CNT 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L17 ANSWER 14 OF 15 HCAPLUS COPYRIGHT 2008 ACS on STN
- TI Expression and function of PPAR.gamma. in rat and human vascular smooth muscle cells
- AB Peroxisome proliferator-activated receptor-y (PPAR.gamma.) is activated by fatty acids, eicosanoids, and insulin-sensitizing thiazolidinediones (TZDs).

The TZD troglitazone (TRO) inhibits vascular smooth muscle cell (VSMC) proliferation and migration in vitro and in post-injury intimal hyperplasia. Rat and human VSMCs expressed mRNA and nuclear PPAR γ1. Three PPAR.qamma. ligands, the TZDs TRO and rosiglitazone and the prostancial 15-deoxy-Al2,14-prostaglandin J2 (15d-PGJZ), all inhibited VSMC proliferation and migration. PPAR γ was upregulated in rat neointima at 7 days and 14 days after balloon injury and was also present in early human atheroma and precursor lesions. Thus, pharmacol. activation of PPAR.gamma. expressed in VSMCs inhibits their proliferation and migration, potentially limiting restenosis and atherosclerosis. These receptors are upregulated during vascular injury.

- AN 2000:240919 HCAPLUS <<LOGINID::20080311>>
- DN 133:148479
- TI Expression and function of PPAR.gamma. in rat and human vascular smooth muscle cells
- AU Law, Ronald E.; Goetze, Stephan; Xi, Xiao-Ping; Jackson, Simon; Kawano, Yasuko; Demer, Linda; Fishbein, Michael C.; Meehan, Woerner P.; Hsueh, Willa A.
- CS Department of Medicine, University of California at Los Angeles School of Medicine, Los Angeles, CA, 90095, USA
- SO Circulation (2000), 101(11), 1311-1318 CODEN: CIRCAZ: ISSN: 0009-7322
- PB Lippincott Williams & Wilkins
- DT Journal
- LA English
- RE.CNT 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L17 ANSWER 15 OF 15 HCAPLUS COPYRIGHT 2008 ACS on STN
- TI A systematic analysis of 40 random genes in cultured vascular smooth muscle subtypes reveals a heterogeneity of gene expression and identifies the tight junction gene zonula occludens 2 as a marker of epithelioid "pup" smooth muscle cells and a participant in carotid neointimal formation

  AB A accumulation of evidence suggests that vascular smooth muscle is
- composed of cell subpopulations with distinct patterns of gene expression. Much of this evidence has come from serendipitous discoveries of genes marking phenotypically distinct aortic cultures derived from 12-day-old and 3-mo-old rats. To identify more systematic differences, we isolated 40 genes at random from libraries of these 2 cultures and examined message expression patterns. To determine consistency of differential expression, we measured mRNA levels in 4 sets of cultures in 6 phenotypically distinct aortic cell clones and in balloon injured rat carotid arteries to determine the relevance of these differences in vitro to in vivo biol. The following 5 consistently differentially expressed genes were identified in vitro: zonula occludens 2 (ZO-2); peroxisome proliferatoractivated receptor δ ( PPAR.delta.); secreted protein, acidic and rich in cysteine (SPARC); al(I)collagen; and A2, an uncharacterized gene. We examined these 5 clones during carotid artery injury and an inconsistently differentially expressed clone Krox-24 because, as an early response transcription factor, it could be involved in the injury response. PPAR δ, A2, and Krox-24 mRNAs were upregulated during the day after injury. ZO-2 and al(I)collagen messages were modulated for up to a month, whereas SPARC message showed no consistent change. An anal. of ZO-2 and other tight junction genes indicates that tight junctions may play a role in smooth muscle biol. These data suggest that a systematic anal. of these libraries is likely to identify a very large number of differentially expressed genes. 20-2 is particularly intriguing both because of this tight junction gene's pattern of prolonged over-expression

after injury and because of its potential role in determining the distinctive epithelioid phenotype of smooth muscle cells identified in rat and other species.

AN 1999:782811 HCAPLUS <<LOGINID::20080311>>

DN 132:289502

- TI A systematic analysis of 40 random genes in cultured vascular smooth muscle subtypes reveals a heterogeneity of gene expression and identifies the tight junction gene zonula occludens 2 as a marker of epithelioid "pup" smooth muscle cells and a participant in carotid neointimal formation
- AU Adams, Lawrence D.; Lemire, Joan M.; Schwartz, Stephen M.
- CS Department of Pathology, University of Washington, Seattle, WA, 98195-7335, USA
- SO Arteriosclerosis, Thrombosis, and Vascular Biology (1999), 19(11), 2600-2608 CODEN: ATVBFA; ISSN: 1079-5642

PB Lippincott Williams & Wilkins

DT Journal

LA English

RE.CNT 56 THERE ARE 56 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

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chain nodes :
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
chain bonds :
1-2 1-4 1-6 1-14 2-3 2-13 3-9 4-5 4-15 5-7 6-8 9-10 9-11 9-12
exact/norm bonds :
1-6 2-3 3-9 4-5 5-7 6-8 9-10 9-11 9-12
exact bonds :
1-2 1-4 1-14 2-13 4-15
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## G1:C,H,P

Match level : 1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS 7:CLASS 8:CLASS 9:CLASS 10:CLASS 11:CLASS 12:CLASS 13:CLASS 14:CLASS 15:CLASS => s 133 SAMPLE SEARCH INITIATED 11:05:14 FILE 'REGISTRY' SAMPLE SCREEN SEARCH COMPLETED -1390 TO ITERATE

1390 ITERATIONS 100.0% PROCESSED INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\* \*\*COMPLETE\*\* BATCH

PROJECTED ITERATIONS: 25564 TO 30036 PROJECTED ANSWERS: 18904 TO 22776

L34 50 SEA SSS SAM L33

=> d 134 scan

L34 50 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

IN D-myo-Inositol, 2,6-bis-O-(phenylmethyl)-, 1-[(2R)-2,3-bis[(1oxooctyl)oxy]propyl phenylmethyl phosphate] 3,4,5-tris[bis(phenylmethyl) phosphate]

50 ANSWERS

MF C88 H104 O22 P4

Absolute stereochemistry.

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

- L34 50 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN
- Eicosapentaenoic acid, (1R)-1-[[[(2-aminoethoxy)hydroxyphosphinyl]oxy]meth v1]-2-[(1-oxoeicosv1)oxv]ethv1 ester, (Z,Z,Z,Z,Z)-
- MF C45 H80 N O8 P
- IDS

CM 1

Absolute stereochemistry.

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

⇒> s 133 sss full FULL SEARCH INITIATED 11:05:35 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED - 27926 TO ITERATE

100.0% PROCESSED 27926 ITERATIONS 21166 ANSWERS SEARCH TIME: 00.00.01

L35 21166 SEA SSS FUL L33

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=> s 135/thu 36417 L35

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987072 THU/RL
1.36
          6231 L35/THU
                 (L35 (L) THU/RL)
=> s 12 and 136
         10685 PPAR
         20400 PEROXISOME
         13861 PROLIFERATOR
        551870 ACTIVATED
        742262 RECEPTOR
          8211 PEROXISOME PROLIFERATOR-ACTIVATED RECEPTOR
                 (PEROXISOME (W) PROLIFERATOR (W) ACTIVATED (W) RECEPTOR)
L37
             4 L2 AND L36
=> s 18 and 136
          1938 NEOTNTIMA
          9253 RESTENOSIS
          5656 STENT
L38
            54 L8 AND L36
=> s 138 and (PY<2004 or AY<2004 or PRY<2004)
      23979567 PY<2004
       4765121 AY<2004
       4243738 PRY<2004
            44 L38 AND (PY<2004 OR AY<2004 OR PRY<2004)
=> d 137 1-4 ti abs bib
L37 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2008 ACS on STN
     Linoleic Acid-Enriched Phospholipids Act through Peroxisome
     Proliferator-Activated Receptors α To Stimulate Hepatic
     Apolipoprotein A-I Secretion
AΒ
     A uniquely formulated soy phospholipid, phosphatidylinositol (PI), is
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under development as a therapeutic agent for increasing plasma high-d. lipoprotein (HDL) levels. Soy PI has been shown to increase plasma HDL and apolipoprotein A-I (apoA-I) levels in phase I human trials. Low micromolar concns. of PI increase the secretion of apoA-I in model human hepatoma cell lines, through activation of G-protein and mitogen-activated protein (MAP) kinase pathways. Expts. were undertaken to determine the importance of the PI head group and acyl chain composition on hepatic apoA-I secretion. Phospholipids with choline and inositol head groups and one or more linoleic acid (LA) acvl chains were shown to stimulate apoA-I secretion by HepG2 cells and primary human hepatocytes. Phospholipids containing two LA groups (dilinoleoylphosphatidylcholine, DLPC) were twice as active as those with only one LA group and promoted a 4-fold stimulation in apoA-I secretion. Inhibition of cytosolic phospholipase A2 with pyrrolidine 1 (10 µM) resulted in complete attenuation of PI- and DLPC-induced apoA-I secretion. Pretreatment with the peroxisome proliferator-activated receptor α ( PPAR.alpha.) inhibitor MK886 (10 µM) also completely blocked PI- and DLPC-induced apoA-I secretion. Hepatic PPAR.alpha. expression was significantly increased by both PI and DLPC. However, in contrast to that seen with the fibrate drugs, PI caused minimal inhibition of catalytic activities of cytochrome P 450 and UGT1A1 enzymes. These data suggest that LA-enriched phospholipids stimulate hepatic apoA-I secretion through a MAP kinase stimulation of PPAR.alpha.. LA-enriched phospholipids have a greater apoA-I secretory activity than the fibrate drugs and a reduced likelihood to interfere with concomitant drug therapies. AN 2008:58022 CAPLUS <<LOGINID::20080311>>

DN 148:229144

- Linoleic Acid-Enriched Phospholipids Act through Peroxisome Proliferator-Activated Receptors α To Stimulate Hepatic Apolipoprotein A-I Secretion
- Pandey, Nihar R.; Renwick, Joanna; Misquith, Ayesha; Sokoll, Ken; Sparks, ΑU Daniel L.
- Liponex, Inc., Ottawa, ON, K2G 3R8, Can.
- Biochemistry (2008), 47(6), 1579-1587 SO CODEN: BICHAW; ISSN: 0006-2960
- PB American Chemical Society
- DT Journal
- T.A English
- RE.CNT 64 THERE ARE 64 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L37 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2008 ACS on STN
- TI Method and compound for the treatment of valvular stenosis using a reverse lipid transport agonist
- AB A method for treating valvular stenosis The method involves the administration of a therapeutically effective amount of a reverse lipid (in particular cholesterol) transport agonist to a mammal. The reverse lipid transport agonist is selected from the group consisting of a high d. lipoprotein (HDL), a peptide with HDL-like physiol, effects, a peptide with HDL-like physiol, effects complexed to a lipid, an HDL-mimetic agent, a cholestervl ester transfer protein (CETP) modulator, a scavenger receptor class B, member 1 (SRB1) modulator, a liver X receptor/retinoid X receptor (LXR/RXR) agonist, an ATP-binding cassette transporter-1 (ABCA1) agonist and a peroxisome proliferator
  - activated receptor (PPAR) agonist. Most
- preferred is an apolipoprotein A-1 mimetic peptide/phospholipid complex. AN 2007:1396181 CAPLUS <<LOGINID::20080311>>

Method and compound for the treatment of valvular stenosis using a reverse

DN 148:24443

TI

- lipid transport agonist Tardif, Jean-Claude
- IN
- Institut de Cardiologie de Montreal, Can. PA SO
- PCT Int. Appl., 45pp. CODEN: PIXXD2
- DT Patent

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	PA:	TENT :	NO.			KIN	D	DATE			APPL	ICAT	ION	NO.		D	ATE	
PI	WO	2007	1374	00		A1	-	2007	1206		viO 2	007-	CA89	5		2	0070	523
		W:	AE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BH,	BR,	BW,	BY,	BZ,	CA,
			CH,	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,
			GD,	GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KM,
			KN,	KP,	KR,	KZ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LY,	MA,	MD,	MG,	MK,
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			TZ,	UA,	UG,	US,	UZ,	VC,	VN,	ZA,	ZM,	zw						
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			IS,	IT,	LT,	LU,	LV,	MC,	MT,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,
								GΑ,										
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RE.	CNT	2.	TH	ERE .	ARE :	2 CT	TED	REFE	RENCI	ES A	VATL	ABLE	FOR	THI	S RE	CORD		

- THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L37 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2008 ACS on STN
- TI Pharmacological method for treatment of neuropathic pain

- AB Disclosed are methods and compns. useful for treatment of neuropathic pain. In particular, the present invention provides methods of activating gamma-subtype peroxisome proliferator-activated receptors (PPAR γ) to inhibit, relieve, or treat neuropathic pain.
- AN 2007:1213033 CAPLUS <<LOGINID::20080311>>
- DN 147:480401
- Pharmacological method for treatment of neuropathic pain TT
- IN Taylor, Bradley K.
- PA USA
- SO U.S. Pat. Appl. Publ., 24pp.
- CODEN: USXXCO
- Patent.
- LA English FAN.CNT 1

	PA:	ENT 1	.00			KIN	D	DATE			APPL	ICAT	ION	NO.		D	ATE	
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PI	US	2007	2495	61		A1		2007	1025		US 2	007-	7398	11		2	0070	425
	WO	2007	1277	91		A2		2007	1108		WO 2	007-	US67	406		2	0070	425
		W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BH,	BR,	BW,	BY,	BZ,	CA,
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			IS,	IT,	LT,	LU,	LV,	MC,	MT,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,
	BJ, CF, CG				CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG,	BW,
	GH, GM, KE			KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	
	BY, KG, KZ					MD,	RU,	TJ,	TM									
PRAI	US	2006	-795	078P		P		2006	0425									

- OS MARPAT 147:480401
- L37 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2008 ACS on STN
- Lysophosphatidic acid reduces the organ injury caused by endotoxemia-A role for G-protein-coupled receptors and peroxisome proliferator-activated receptor-y
- AB Exogenous lysophosphatidic acid (LPA) has been shown to beneficial in renal ischemia/reperfusion injury, wound healing and colitis. LPA acts via specific G-protein-coupled receptors and also peroxisome

proliferator-activated receptor-y ( PPAR-v). However, activation of PPAR-v is dependent on the presence of an unsatd. acyl chain. Here we investigate the effects of saturated LPA (18:0) and unsatd. LPA (18:1) on the organ injury associated with endotoxemia and the receptors mediating LPA activity. Male Wistar rats received either lipopolysaccharide (LPS, 6 mg/kg i.v.) or vehicle. The PPAR-y antagonist GW9662 (1 mg/kg i.v.), the LPA receptor antagonist Ki16425 (0.5 mg/kg i.v.) or vehicle was administered 30 min after LPS. LPA 18:0 or LPA 18:1 (1 mg/kg i.v.) or vehicle was administered 1 h after injection of LPS. Endotoxemia for 6 h resulted in an increase in serum levels of aspartate aminotransferase, alanine aminotransferase and creatine kinase. Therapeutic administration of LPA 18:0 or 18:1 reduced the organ injury caused by LPS. LPA 18:0 also attenuated the increase in plasma IL-1 $\beta$  caused by LPS. Ki16425, but not GW9662, attenuated the beneficial effects of LPA 18:0, however, Ki16425 and GW9662 attenuated the beneficial effects of 18:1. In conclusion, LPA reduces the organ injury caused by endotoxemia in the rat. Thus, LPA may be useful in the treatment of shock of various etiologies. The mechanism of action is related to acyl chain saturation, with LPA 18:0

acting via G-protein-coupled receptors and LPA 18:1 acting via G-protein-coupled receptors and PPAR-γ.

- AN 2007:119866 CAPLUS <<LOGINID::20080311>>
- DN 146:266187
- TI Lysophosphatidic acid reduces the organ injury caused by endotoxemia-A role for G-protein-coupled receptors and peroxisome proliferator-activated receptor-y
- AU Murch, Oliver; Collin, Marika; Thiemermann, Christoph
- CS Centre for Experimental Medicine, Nephrology & Critical Care, The William Harvey Research Institute, St. Bartholomew's and The Royal London School of Medicine and Dentistry, Queen Mary, University of London, London, ECIM 6BO, UK
- SO Shock (2007), 27(1), 48-54
  - CODEN: SAGUAI; ISSN: 1073-2322
- PB Lippincott Williams & Wilkins
- DT Journal
- LA English
- RE.CNT 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD
  ALL CITATIONS AVAILABLE IN THE RE FORMAT

## => d 139 1-44 ti

- L39 ANSWER 1 OF 44 CAPLUS COPYRIGHT 2008 ACS on STN
- TI Endothelial cell specifically binding peptides and their use for targeting of gene delivery vectors
- L39 ANSWER 2 OF 44 CAPLUS COPYRIGHT 2008 ACS on STN
- TI Oxidized lipids and uses thereof in the treatment of inflammatory diseases and disorders
- L39 ANSWER 3 OF 44 CAPLUS COPYRIGHT 2008 ACS on STN
- TI Use of lipid conjugates in the treatment of diseases
- L39 ANSWER 4 OF 44 CAPLUS COPYRIGHT 2008 ACS on STN
- TI Methods and compounds for the treatment of vascular stenosis using a combination of N-phenyl-2-pyrimidine derivatives and PI3K inhibitors
- L39 ANSWER 5 OF 44 CAPLUS COPYRIGHT 2008 ACS on STN
- ${\tt TI} \quad {\tt P-selectin} \ {\tt targeting} \ {\tt compositions} \ {\tt containing} \ {\tt P-selectin} \ {\tt targeting} \ {\tt peptides} \ {\tt conjugated} \ {\tt with} \ {\tt lipids}$
- L39 ANSWER 6 OF 44 CAPLUS COPYRIGHT 2008 ACS on STN
- TI Method and system for systemic delivery of growth arresting, lipid-derived bioactive compounds
- L39 ANSWER 7 OF 44 CAPLUS COPYRIGHT 2008 ACS on STN
- TI Human p53 deletion mutant proteins and therapeutic use in cancer therapy
- L39 ANSWER 8 OF 44 CAPLUS COPYRIGHT 2008 ACS on STN
- TI Methods and compositions using defined oxidized phospholipids for prevention and treatment of atherosclerosis and other disorders
- L39 ANSWER 9 OF 44 CAPLUS COPYRIGHT 2008 ACS on STN
- TI Method using apolipoprotein-sphingomyelin complexes for treatment of dyslipidemic disorders
- L39 ANSWER 10 OF 44 CAPLUS COPYRIGHT 2008 ACS on STN
- ${\tt TI}$   $\,$  Peptide and peptide analog apolipoprotein A-I agonists and their use to treat dyslipidemic disorders
- L39 ANSWER 11 OF 44 CAPLUS COPYRIGHT 2008 ACS on STN
- TI Compositions and methods for dosing liposomes of certain sizes to treat or

prevent disease

- L39 ANSWER 12 OF 44 CAPLUS COPYRIGHT 2008 ACS on STN
- TI Integrin targeted imaging agents
- L39 ANSWER 13 OF 44 CAPLUS COPYRIGHT 2008 ACS on STN
- TI Intramural Delivery of Recombinant Apolipoprotein A-IMilano/Phospholipid Complex (ETC-216) Inhibits In-Stent Stenosis in Porcine Coronary Arteries
- L39 ANSWER 14 OF 44 CAPLUS COPYRIGHT 2008 ACS on STN
- TI Drug delivery device with protective separating layer
- L39 ANSWER 15 OF 44 CAPLUS COPYRIGHT 2008 ACS on STN
- TI Peptide and peptide analog apolipoprotein A-I agonists, and their use to treat dyslipidemic disorders
- L39 ANSWER 16 OF 44 CAPLUS COPYRIGHT 2008 ACS on STN
- TI Gene transfer of human vascular endothelial growth factor 165 for prevention of stent restenosis after transjugular intrahepatic portosystemic shunt
- L39 ANSWER 17 OF 44 CAPLUS COPYRIGHT 2008 ACS on STN
- TI Therapy of proliferative disorders by direct irradiation of cell nuclei with tritiated nuclear targeting agents
- L39 ANSWER 18 OF 44 CAPLUS COPYRIGHT 2008 ACS on STN
- TI Preparation of prodrugs of 3-(pyrrol-2-ylmethylidene)-2-indolinones and activity as modulators of protein kinases
- L39 ANSWER 19 OF 44 CAPLUS COPYRIGHT 2008 ACS on STN
- TI Methods employing and compositions containing defined oxidized phospholipids for prevention and treatment of atherosclerosis
- L39 ANSWER 20 OF 44 CAPLUS COPYRIGHT 2008 ACS on STN
- TI Receptor antagonist-lipid conjugates and delivery vehicles containing same
- L39 ANSWER 21 OF 44 CAPLUS COPYRIGHT 2008 ACS on STN
- CI Cationic lipid-mediated transfection of bovine aortic endothelial cells inhibits their attachment
- L39 ANSWER 22 OF 44 CAPLUS COPYRIGHT 2008 ACS on STN
- TI Optimization of nonviral gene transfer of vascular smooth muscle cells in vitro and in vivo
- L39 ANSWER 23 OF 44 CAPLUS COPYRIGHT 2008 ACS on STN
- TI Surface modification of liposomes for selective cell targeting in cardiovascular drug delivery
- L39 ANSWER 24 OF 44 CAPLUS COPYRIGHT 2008 ACS on STN
- TI Focal arterial transgene expression after local gene delivery
- L39 ANSWER 25 OF 44 CAPLUS COPYRIGHT 2008 ACS on STN
- TI Pharmaceutical composition in the form of a nucleic acid lipid complex, the production thereof and its use in gene therapy
- L39 ANSWER 26 OF 44 CAPLUS COPYRIGHT 2008 ACS on STN
- TI Implantable depot drug delivery systems
- L39 ANSWER 27 OF 44 CAPLUS COPYRIGHT 2008 ACS on STN
- TI Toxicity, uptake kinetics and efficacy of new transfection reagents:

Increase of oligonucleotide uptake

- L39 ANSWER 28 OF 44 CAPLUS COPYRIGHT 2008 ACS on STN
- TI Preparation of vitronectin receptor antagonist pharmaceuticals
- L39 ANSWER 29 OF 44 CAPLUS COPYRIGHT 2008 ACS on STN
- TI Preparation of vitronectin receptor antagonist pharmaceuticals
- L39 ANSWER 30 OF 44 CAPLUS COPYRIGHT 2008 ACS on STN
- TI Preparation of vitronectin receptor antagonist pharmaceuticals
- L39 ANSWER 31 OF 44 CAPLUS COPYRIGHT 2008 ACS on STN
- TI Ribozyme therapy for the treatment and/or prevention of restenosis
- L39 ANSWER 32 OF 44 CAPLUS COPYRIGHT 2008 ACS on STN
- TI Agent for gene therapy of tumors and neurodegenerative, cardiovascular, and autoimmune diseases
- L39 ANSWER 33 OF 44 CAPLUS COPYRIGHT 2008 ACS on STN
  - T Ribozyme-mediated inhibition of cell proliferation: A model for identifying and refining a therapeutic ribozyme
- L39 ANSWER 34 OF 44 CAPLUS COPYRIGHT 2008 ACS on STN
- TI P-selectin translocation to vascular epithelial lumen by ionizing radiation, and therapeutic use
- L39 ANSWER 35 OF 44 CAPLUS COPYRIGHT 2008 ACS on STN
  - I Arterial Uptake of Biodegradable Nanoparticles: Effect of Surface Modifications
- L39 ANSWER 36 OF 44 CAPLUS COPYRIGHT 2008 ACS on STN
- TI Induction of E-selectin for targeting therapeutic agents to disease-associated vascular endothelial cells
- L39 ANSWER 37 OF 44 CAPLUS COPYRIGHT 2008 ACS on STN
- ${\tt TI} \quad {\tt Lipid} \ {\tt constructs} \ {\tt for} \ {\tt targeting} \ {\tt oligonucleotides} \ {\tt to} \ {\tt vascular} \ {\tt smooth} \ {\tt muscle} \ {\tt tissue}$
- L39 ANSWER 38 OF 44 CAPLUS COPYRIGHT 2008 ACS on STN
- II Lipid constructs for cytoplasmic delivery of antisense oligonucleotides
- L39 ANSWER 39 OF 44 CAPLUS COPYRIGHT 2008 ACS on STN
- TI Antisense DNAs to cyclins and cyclin kinases for inhibition of proliferation of vascular smooth muscle cells
- L39 ANSWER 40 OF 44 CAPLUS COPYRIGHT 2008 ACS on STN
- TI Surface-modified nanoparticles and method of making and using them
- L39 ANSWER 41 OF 44 CAPLUS COPYRIGHT 2008 ACS on STN
- TI Ribozymes cleaving growth factor mRNAs for treatment of restenosis and cancers
- L39 ANSWER 42 OF 44 CAPLUS COPYRIGHT 2008 ACS on STN
- Method for treating diseases mediated by cellular proliferation in response to PDGF, EGF, FGF and VEGF
- L39 ANSWER 43 OF 44 CAPLUS COPYRIGHT 2008 ACS on STN
- TI Interdigitation-fusion liposomes containing arachidonic acid metabolites
- L39 ANSWER 44 OF 44 CAPLUS COPYRIGHT 2008 ACS on STN
- TI Inhibition of proliferation of vascular smooth muscle cells by antisense

## oligonucleotides against cyclins and cyclin-dependent kinases

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FILE 'STNGUIDE' ENTERED AT 11:06:57 ON 11 MAR 2008 USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

FILE CONTAINS CURRENT INFORMATION.
LAST RELOADED: Mar 7, 2008 (20080307/UP).

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- L39 ANSWER 2 OF 44 CAPLUS COPYRIGHT 2008 ACS on STN
- TI Oxidized lipids and uses thereof in the treatment of inflammatory diseases and disorders
- AB The invention provides synthetic oxidized lipids and methods using oxidized lipids for treating and preventing an inflammation associated with an endogenous oxidized lipid.
- AN 2007:486401 CAPLUS <<LOGINID::20080311>>
- DN 146:475683
- TI Oxidized lipids and uses thereof in the treatment of inflammatory diseases and disorders
- IN Harats, Dror; George, Jacob; Halperin, Gideon; Mendel, Itzhak
- PA Israel
- SO U.S. Pat. Appl. Publ., 87pp., Cont.-in-part of U.S. Ser. No. 567,543.
- CODEN: USXXCO DT Patent
- LA English
- LA Englist

FAN.CNT 3 PATENT NO.																			
	PAT	ENT:	NO.			KIN	D	DATE			APPL	ICAT	ION :	NO.		D	ATE		
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PI	US	2007	0998	68		A1		2007	0503		US 2	006-	5286	57		2	0060	928 <	
	US 2003225035 US 6838452 WO 2004106486				A1		2003	1204		US 2	003-	4453	47		2	0030	527 <		
					B2		2005	0104											
	WO	US 2003225035 US 6838452 WO 2004106486 WO 2004106486				A2		2004	1209		WO 2	004-	IL45	3		2	0040	527 <	
	WO					A3		2005	0106										
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			CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,	
	US 6838452 WO 2004106486			GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KZ,	LC,		
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			SI,	SK,	TR.	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	
			SN,	TD,	TG														

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PRAI US 2003-445347
                    A1 20030527 <--
    WO 2004-IL453
                      W
                          20040527
    US 2006-567543
                     A2
                          20060208
    US 2000-252574P
                     P
                           20001124 <--
                     A2
    WO 2001-IL101080
                          20011122 <--
   MARPAT 146:475683
OS
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- L39 ANSWER 3 OF 44 CAPLUS COPYRIGHT 2008 ACS on STN
- TI Use of lipid conjugates in the treatment of diseases
- AB This invention provides lipid conjugates, i.e., compds. represented by the structure of the general formula [L-Z-Y]nX (L = lipid, phospholipid; Z = nothing, ethanolamine, serine, inositol, choline, glycerol; Y = nothing, spacer group ranging in length from 2 to 30 atoms; X; monomer, dimer, oligomer, polymer, glycosaminoglycan; n = 1 to 1000; wherein any bond between L, Z, Y and X is either an amide or an esteric bond). Administration of these compds. comprises effective treatment of a subject afflicted with diseases involving the production of lipid mediators and/or impairment of glycosaminoglycan functioning. For example, CM-cellulose was conjugated to dipalmitoyl phosphatidylethanolamine (PE) to obtain a CMPE conjugate. The CMPE conjugate was effective in the treatment of obstructive respiratory disease, as demonstrated in asthma models. At a dose of 10 uM. CMPE inhibited quinea pig tracheal ring constriction induced by phospholipase (0.5 u/mL) and endothelin-1 (100 nM) by 100% and 92%, resp. CMPE also reduced mortality of rats with TNBS-induced ulcerative colitis (9 out of 46 animals died compared to 27 of 46 in the control PBS-treated group).
- AN 2005:1004345 CAPLUS <<LOGINID::20080311>>
- DN 143:292563
- TI Use of lipid conjugates in the treatment of diseases
- IN Yedgar, Saul PA Israel
- SO U.S. Pat. Appl. Publ., 129 pp., Cont.-in-part of U. S. Ser. No. 756,765. CODEN: USXXCO
- DT Patent LA English
- LA Englisi FAN.CNT 12

21111	PATENT				KIN		DATE			APPL	ICAT	ION	NO.			ATE		
PI	US 200 US 200 US 703	52030 20491	54		A1 A1 B2		2002	0915 0425 0425			004- 001-				2	0040	929	
	US 200 US 200 US 200	60794 61895	68		A1 A1 A1		2006 2006	0413 0824 0824		US 2	005- 005- 005-	2209	64		2	0050: 0050: 0050:	908	<
	US 200 US 200 US 200 WO 200	61895 71557	71 00		A1 A1 A1 A2		2006 2007	0824 0824 0705 0315		US 2 US 2	005- 005- 006- 006-	2209 4752	68 40		2	0050: 0050: 0060:	908 627	<
	WO 200		58		A3		2007	0614										
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US 2007117779 A1 20070524 US 2006-598812 20061114 <--
PRAI US 2000-174907P P 20000110 <--
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US 2004-950496 A2 20040302
US 2005-220964 A3 2005008
      US 2005-220965 A1 20050908
US 2005-220967 A 20050908
OS MARPAT 143:292563
L39 ANSWER 4 OF 44 CAPLUS COPYRIGHT 2008 ACS on STN
TI Methods and compounds for the treatment of vascular stenosis using a
      combination of N-phenyl-2-pyrimidine derivatives and PI3K inhibitors
AB
       This invention features a method of treatment for vascular stenosis or
       restenosis using a combination of N-phenyl-2-pyrimidine derivs.
       such as imatinib mesylate and PI3K inhibitors, such as rapamycin.
       2004:1080793 CAPLUS << LOGINID:: 20080311>>
AN
DN
      142:32971
TI
      Methods and compounds for the treatment of vascular stenosis using a
      combination of N-phenyl-2-pyrimidine derivatives and PI3K inhibitors
      Sukhatme, Vikas P.
      Beth Israel Deaconess Medical Center, USA
      PCT Int. Appl., 48 pp.
      CODEN: PIXXD2
DT Patent
LA English
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	PATENT NO.																		
	PA:	TENT	NO.			KIN	D	DATE						NO.		D	ATE		
PI	WO	2004	1081	30		A1	_	2004	1216							2	0040	 501 <	
		W:						AU,											
								DE,											
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	LK, LR, L																		
								PL,											
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			AZ.	BY.	KG.	KZ.	MD.	RU,	TJ.	TM.	AT.	BE.	BG.	CH.	CY.	CZ.	DE.	DK.	
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	03	2528				2.1		2004	1016		03 0	004	2520	022		2	0010	-01 -	
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		R:													NL,	SE,	MC,	PT,	
			ΙE,	SI,	FI,	RO,	CY,	TR,	BG,	CZ,	EE,	HU,	PL,	SK					
	JP 2006526652				T		2006	1124		JP 2	006-	5150	65		2	0040	501 <		
	US	S 2006240014				A1		2006	1026		US 2	006-	5590	57		2	0060	530 <	
PRAI																			
	WO	2004	-US1	7273		W		2004	0601										
RE.CN										ES A	VAIL	ABLE	FOR	THI	S RE	CORD			

- L39 ANSWER 6 OF 44 CAPLUS COPYRIGHT 2008 ACS on STN
- TI Method and system for systemic delivery of growth arresting, lipid-derived bioactive compounds

ALL CITATIONS AVAILABLE IN THE RE FORMAT

AB A system and method for optimizing the systemic delivery of growth-arresting lipid-derived bioactive drugs or gene therapy agents to

an animal or human in need of such agents utilizing nanoscale assembly systems, such as liposomes, resorbable and non-aggregating nanoparticle dispersions, metal or semiconductor nanoparticles, or polymeric materials such as dendrimers or hydrogels, each of which exhibit improved lipid solubility, cell permeability, an increased circulation half life and pharmacokinetic profile with improved tumor or vascular targeting.

AN 2004:965003 CAPLUS <<LOGINID::20080311>>

DN 141:400948

- TI Method and system for systemic delivery of growth arresting, lipid-derived bioactive compounds
- IN Kester, Mark; Stover, Thomas; Lowe, Tao; Adair, James; Kim, Young Shin PA

The Penn State Research Foundation, USA

- SO PCT Int. Appl., 68 pp. CODEN: PIXXD2
- DТ Patent
- English LA
- EAN ONT 1

PATENT NO.								DATE				ICAT					ATE		
PI		2004 2004									WO 2	004-	US12	783		20	0040	426 -	<
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	EP	1617	808			A2		2006	0125		EP 2	004-	7603	81		20	0040	426 -	<
		R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,	
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PRAI									0425										
		2003 2004							0428 0426	<-	-								

- L39 ANSWER 14 OF 44 CAPLUS COPYRIGHT 2008 ACS on STN
- TI Drug delivery device with protective separating layer
- AB The present invention relates to implantable medical devices for delivery of drugs to a patient. More particularly, the invention relates to a device having the drugs protected by a protective layer that prevents or retards processes that deactivate or degrade the active agents. Thus, a mixture of poly(lactide-co-glycolide) (PLGA) 7% by weight and a suitable organic

solvent, such as DMSO, NMP, or DMAC 93% is prepared. The mixture is loaded dropwise into holes in the stent, then the solvent is evaporated to begin formation of the barrier layer. A second barrier layer is laid over the first by the same method of filling polymer solution into the hole followed by solvent evaporation The process is continued until 5 individual layers have been laid down to form the barrier layer. A second mixture of a limus, such as sirolimus, 3% solid basis, and

dipalmitoylphosphatidylcholine 7% solid basis in DMSO is introduced into holes in the stent over the barrier layer. The solvent is evaporated to form a drug filled protective layer and the filling and

evaporation

procedure repeated until the hole is filled to about 75% of its total volume with drug in protective layer layered on top of the barrier layer.

AN 2003:281958 CAPLUS <<LOGINID::20080311>>

DN 138:292774

- TI Drug delivery device with protective separating layer
- IN Shanley, John F.; Parker, Theodore L. PA USA
- SO
- U.S. Pat. Appl. Publ., 17 pp., Cont.-in-part of U.S. Ser. No. 948,989. CODEN: USXXCO
- DТ Patent
- LA English
- FAN.CNT 10

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		K.						PT.						rr,	GD,	Gr,	no,	ır,	
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	EP	2003	-759	501		A3		2003	0922	<-	_								
	WO	2003	-US3	0125		W													
	AU	2004	-203	857		A3		2004											
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RE.CNT 380 THERE ARE 380 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L39 ANSWER 18 OF 44 CAPLUS COPYRIGHT 2008 ACS on STN

Preparation of prodrugs of 3-(pyrrol-2-ylmethylidene)-2-indolinones and activity as modulators of protein kinases

AΒ The present invention relates to pyrrole substituted 2-indolinone compds. (shown as I; e.g. 3-[1-(3,5-dimethyl-1H-pyrrol-2-yl)meth-(Z)-ylidene]-2oxo-2,3-dihydroindole-1-carbonyl chloride) and their pharmaceutically acceptable salts which modulate the activity of protein kinases and therefore are expected to be useful in the prevention and treatment of protein kinase related cellular disorders such as cancer (no data). In I, R1 and R2 are independently H, halo, alkyl, alkylthio, nitro, trihalomethyl, hydroxy, hydroxyalkyl, alkoxy, cyano, aryl, heteroaryl, -C(0)R7 (R7 is alkyl, amino, hydroxy, alkoxy, aryl, heteroaryl, aryloxy, heteroarvloxy, heterocycle, and aminoalkylamino), -NR8R9, -NR8C(O)R9, -SO2R8, and -S(O)2NR8R9 (R8 and R9 are independently H, alkyl, aryl and heteroaryl, or R8 and R9 together with the N to which they are attached form a saturated heterocycloamino). R3 is H, alkyl, hydroxyalkyl, aminoalkyl, -C(O)R7, aryl, and heteroaryl; R4 is H, alkyl, -C(O)R7 aryl, and heteroaryl. R5 is H and -COR10 where R10 is alkyl, alkoxy, hydroxy, aryl, aryloxy, heteroaryl, heterocycle, alkylamino, dialkylamino, or -NR11R12 where R11 is H or alkyl, and R12 is aminoalkyl, hydroxyalkyl, acetylalkyl, cyanoalkyl, carboxyalkyl, alkoxycarbonylalkyl, heteroaralkyl, or heterocyclylalkyl wherein the alkyl chain in aminoalkyl, heteroaralkyl, heteroaralkyl, or heterocyclylalkyl is optionally substituted with one or two hydroxy group(s); or R4 and R5 together form - (CH2)4- or -(CH2)mCO(CH2)n- wherein n is 0 to 3, provided that n+m is 3. R6 is: (c) -OR13 wherein R13 is alkyl, trifluoromethyl, carboxyalkyl, aminoalkyl, phosphonooxyalkyl, sulfooxyalkyl, hydroxyalkyl, alkoxyalkyl, aryl, heteroaryl, heteroaralkyl, heterocyclyl, monosaccharides and heterocyclylalkyl wherein the alkyl chain in carboxyalkyl, aminoalkyl, phosphonooxyalkyl, sulfooxyalkyl, heteroaralkyl, heterocyclylalkyl, hydroxyalkyl, or alkoxyalkyl is optionally substituted with one or two hydroxy group(s) and further wherein one or two C atoms in said alkyl chain are optionally replaced by O, -NR14- (R14 is H or alkyl), -S-, or -SO2-; or. (d) -NR15R16 where are R15 and R16 are independently H, alkyl, carboxyalkyl, alkoxyalkyl, aminoalkyl, phosphonooxyalkyl, sulfooxyalkyl, hydroxyalkyl, aryl, heteroaryl, heteroaralkyl, and heterocyclylalkyl; wherein the alkyl chain in carboxyalkyl, aminoalkyl, phosphonooxyalkyl, heteroaralkyl, heterocyclylalkyl, hydroxyalkyl, or alkoxyalkyl is optionally substituted with one or two hydroxy group(s) and further wherein one or two C atoms in the alkyl chain are optionally replaced by O, -NR17- (R17 is H or alkyl), -S-, or -SO2-; or R15 and R16 together with the N atom to which they are attached form saturated or unsatd. heterocycloamino;. Although the methods of preparation are not claimed, >80 example prepns. are included, both of I and the unprotected version of I in which the C(O)R6 group has been replaced by H.

Ι

DN 137:294870

AN

- FI Preparation of prodrugs of 3-(pyrrol-2-ylmethylidene)-2-indolinones and activity as modulators of protein kinases
- IN Sun, Connie Li; Wei, Chung Chen; Tang, Peng Cho; Koenig, Marcel; Zhou, Yong; Vojkovsky, Tomas; Nematalla, Asaad S.

2002:793619 CAPLUS <<LOGINID::20080311>>

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PA Sugen, Inc., USA
SO PCT Int. Appl., 194 pp.
     CODEN: PIXXD2
DT
   Patent
LA English
FAN.CNT 1
     PATENT NO.
                   KIND DATE APPLICATION NO.
   WO 2002081466 A1 20021017 WO 2002-US11001 20020409 <--
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              GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
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AU 2002307183 A1 2002101 AU 2002-307183 20020409 <--
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PRAI US 2001-282630P P 20010409 <--
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     MARPAT 137:294870
RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT
L39 ANSWER 19 OF 44 CAPLUS COPYRIGHT 2008 ACS on STN
    Methods employing and compositions containing defined oxidized
ΤI
     phospholipids for prevention and treatment of atherosclerosis
     Novel synthetic forms of etherified oxidized phospholipids and methods of
AB
     utilizing same for preventing and treating atherosclerosis and other
     related disorders, such as cardiovascular disease, cerebrovascular
     disease, peripheral vascular disease, stenosis, restenosis,
     etc., are provided. For example, an effective inhibition of late stage
     atherogenesis was observed in genetically predisposed (apoE-deficient) mice
     following protracted oral exposure to moderate doses (1 mg/mouse) of
     synthetic oxidized LDL components, hexadecyl-2-(5'-oxopentanyl)-sn-
     glycerophosphocholine (ALLE) and 1-hexadecanov1-2-(5'-oxo)pentanov1-sn-3-
     glycerophosphocholine (POVPC) (preparation given), compared to PBS-fed control
     mice. Induction of oral tolerance had no significant effect on other
     parameters measured, such as weight gain, total triglyceride or cholesterol
     blood levels. Surprisingly, it was observed that the inhibition of
     atherogenesis by these oxidized LDL analogs was accompanied by a
     significant reduction in VLDL cholesterol and triglycerides.
    2002:408469 CAPLUS <<LOGINID::20080311>>
AN
DN
    136:395962
ΤI
     Methods employing and compositions containing defined oxidized
     phospholipids for prevention and treatment of atherosclerosis
IN
    Harats, Dror; George, Jacob; Halperin, Gideon
    Cardimmune Ltd., Israel; Vascular Biogenics Ltd. PCT Int. Appl., 73 pp.
PA
SO
     CODEN: PIXXD2
    Patent
LA English
FAN.CNT 3
     PATENT NO. KIND DATE APPLICATION NO. DATE
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                         A3 20021010
     WO 2002041827
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                         A2 20030910 EP 2001-997274
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A3 20030527 <--
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     US 2003-718596
                        A3 20031124 <--
OS
     MARPAT 136:395962
L39 ANSWER 20 OF 44 CAPLUS COPYRIGHT 2008 ACS on STN
TI
     Receptor antagonist-lipid conjugates and delivery vehicles containing same
AB
     Vesicular drug delivery vehicles, such as liposomes, comprise a targeting
     ligand which comprises a non-biol., biomimetic antagonist to a receptor
     to a polar head group of a vesicle-forming lipid. The non-biol.,
     biomimetic antagonist is an antagonist to a receptor upregulated in the
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that is upregulated at a disease site, directly or indirectly chemical linked vascular endothelium of inflammation, infection or tumor sites, selected from integrin receptors, prostate specific membrane antigen (PSMA) receptor, herceptin, Tie 1 and Tie 2 receptors, ICAM1, folate receptor, bFGF receptor, EGF receptor, VEGF receptor, PDGF receptor, etc. The vesicle-forming lipid is selected from phospholipids, sterols, glycolipids, cationic lipids, sphingolipids, glycerolipids, hydrophilic polymer derivs. of these lipids, gemini surfactants, etc. For example, liposomes were prepared containing lipid conjugates with a vitronectin receptor antagonist, (S)-7-[[N--(4-aminobutyl)-N-(benzimidazol-2-ylmethyl)]amino]carbonyl-4-methyl-3-oxo-2,3,4,5-tetrahydro-1H-1,4benzodiazepine-2-acetic acid (preparation given) 0.5 mol%, DSPC 54.5 mol%, and cholesterol 45 mol%. The liposomes were loaded with topotecan using ion gradient or polymer gradient loading/retaining techniques and administered to a patient diagnosed with ovarian cancer to inhibit growth of the cancerous tumor. A dosing regimen was 1.5 mg/m2 of the topotecan liposomes given as a 30 min infusion over the course of 1-3 days in a week for 2 wk in a 21 day cycle, repeated for 4 cycles.

PΤ

AN 2002:353239 CAPLUS <<LOGINID::20080311>>

<sup>136:374827</sup> DN

Receptor antagonist-lipid conjugates and delivery vehicles containing same

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IN Ellens, Harma M.; Monck, Myrna A.; Yeh, Ping-Yang
PA
    Smithkline Beecham Corporation, USA
    PCT Int. Appl., 44 pp.
    CODEN: PIXXD2
DT
    Patent
LA
    English
FAN.CNT 1
    PATENT NO.
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                                                                DATE
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                       A2 20020510 WO 2001-US46206
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PRAI US 2000-245140P
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                              20011029 <--
OS
    MARPAT 136:374827
L39 ANSWER 28 OF 44 CAPLUS COPYRIGHT 2008 ACS on STN
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- Preparation of vitronectin receptor antagonist pharmaceuticals ΤI
- Compds. (Q)d-Ln-Ch (Q is a residue having a benzodiazepine-, AB benzodiazepinedione-, or dibenzotrihydroannulene-type moiety , d = 1-10, Ln is a linking group, Ch is a metal-bonding unit) were prepared for use in the diagnosis and treatment of cancer, methods of imaging tumors in a patient, and methods of treating cancer in a patient. The present invention also provides novel compds. useful for monitoring therapeutic angiogenesis treatment and destruction of new angiogenic vasculature. Thus, (S,S,S)-4-[N-[3-[3,6-diaza-10-[N-(benzimidazo1-2-ylmethyl)-Nmethylcarbamov1]-5-(carboxymethyl)-4-oxobicyclo[5.4.0]undeca-1(7),8,10trien-3-y1]propy1]carbamoy1]-4-[[4-carboxy-2-[2-[1,4,7,10-tetraaza-4,7,10tris(carboxymethyl)cyclodecyl]acetylamino]butanoyl]amino]butanoic acid was prepared (claimed compound). Syntheses of radiopharmaceticals, e.g., 99mTc(VnA)(tricine)(phosphine), where VnA represents the vitronectin
- receptor antagonist, are also described. 2000:421115 CAPLUS <<LOGINID::20080311>>
- AN DN 133:59101
- ΤI Preparation of vitronectin receptor antagonist pharmaceuticals
- Cheesman, Edward H.; Sworin, Michael; Rajopadhyem, Milind IN
- PA Du Pont Pharmaceuticals Co., USA
- SO PCT Int. Appl., 228 pp.
  - CODEN: PIXXD2
- DT Patent
- T.A English
- FAN CNT 8

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      US 6524553
                           B2 20030225
      US 6548663
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      EP 1140864
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TR 2003U-1-1
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US 2003149262 A1 20030807 US
PRAI US 1998-112831P P 19981218 <--
US 1998-80150P P 19981218 <--
US 1998-112715P P 19981218 <--
US 1998-112829P P 19981218 <--
US 1999-281050 A3 19990330 <--
US 1999-281050 A3 19990330 <--
US 1999-1030311 W 19991217 <--
                                  20030703 US 2002-269252
20030807 US 2002-306054
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                                                                         20021126 <--
      MARPAT 133:59101
 OS
 L39 ANSWER 29 OF 44 CAPLUS COPYRIGHT 2008 ACS on STN
      Preparation of vitronectin receptor antagonist pharmaceuticals
      Compds. (Q)d-Ln-Ch (Q is a residue having a quinolone-type moiety , d =
 AB
      1-10, Ln is a linking group, Ch is a metal-bonding unit) were prepared for
      use in the diagnosis and treatment of cancer, methods of imaging tumors in
      a patient, and methods of treating cancer in a patient. The present
      invention also provides novel compds. useful for monitoring therapeutic
      angiogenesis treatment and destruction of new angiogenic vasculature.
      Thus, [3-[1-[3-[3-[N-[3-[2-[N-(L-Asp-L-Asp)-3-
      aminopropoxy]ethoxy]ethoxy]propyl]carbamoyl]propanoylamino]propyl]-7-
      [(imidazol-2-ylamino)methyl]-4-oxo(3-hydroquinolyl)carbonylamino]-2-
      [[(2,4,6-trimethylphenyl)sulfonyl]amino]propanoic acid DOTA conjugate was
      prepared (claimed compound). Syntheses of radiopharmaceuticals, e.g.,
      99mTc(VnA)(tricine)(phosphine), where VnA represents the vitronectin
      receptor antagonist, are also described.
 AN
     2000:420994 CAPLUS <<LOGINID::20080311>>
 DN
     133:59099
 TI
      Preparation of vitronectin receptor antagonist pharmaceuticals
 IN
     Harris, Thomas David; Rajodadhye, Milind
 PA
      Du Pont Pharmaceuticals Company, USA
 SO.
     PCT Int. Appl., 300 pp.
      CODEN: PIXXD2
      Patent
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     English
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      WO 2000035492 A2 20000622
WO 2000035492 A3 20010118
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20011127 US 1999-281207

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RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,

A1 20020207 US 1999-281209

MD, RU, TJ, TM

В1

PT, SE

US 2002015680

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A2 20011010 EP 1999-967443
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                          20011030
                                     BR 1999-17079
                                                          19991217 <--
    JP 2002532440
                     T
                          20021002 JP 2000-587811
                                                         19991217 <--
    AU 766822
                     B2 20031023 AU 2000-23716
   19991217 <--
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                                                         20010507 <--
                                                         20010522 <--
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                                                         20021126 <--
PRAI US 1998-112732P
OS
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- L39 ANSWER 30 OF 44 CAPLUS COPYRIGHT 2008 ACS on STN
- TI Preparation of vitronectin receptor antagonist pharmaceuticals
- Teparation of Virtinetchi responsion and an indazole-type molety, d = 1-10, In is a linking group, Ch is a metal-bonding unit) were prepared for use in the diagnosis and treatment of cancer, methods of imaging tumors in a patient, and methods of treating cancer in a patient. The present invention also provides novel compde. useful for monitoring therapeutic angiogenesis treatment and destruction of new angiogenic vasculature. Thus, 2-[[[4-[4-[4-[[3-[2-[2-[3-[[6-[[1-aza-2-(2-sulfophenyl)vinyl]pmino](3-pyridyl))carbonylamino]-3-[[1-[3-(indazole-2-ylamino)propyl](IH-indazol-5-yl)]carbonylamino]propoxolethoxylethox
- AN 2000:420991 CAPLUS <<LOGINID::20080311>>

US 6524553 B2 20030225

- DN 133:59098
- TI Preparation of vitronectin receptor antagonist pharmaceuticals
- IN Rajopadhye, Milind; Harris, Thomas David; Cheesman, Edward H.
- PA Du Pont Pharmaceuticals Company, USA
- SO PCT Int. Appl., 362 pp.
- CODEN: PIXXD2
- DT Patent
- LA English

T. Larra .	CLAT	0																
	PATENT NO.				KIN	D	DATE		- 2	APPL	ICAT	ION	NO.		D	ATE		
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PI	WO 2000035488 WO 2000035488				A2		2000	0622	1	WO 1	999-1	JS30:	312		1	9991	217 <	
	WO 2000035488					A3		2000	1109									
	WO 2000035488 W: AL, AU, E			BR,	CA,	CN,	CZ,	EE,	HU,	IL,	IN,	JP,	KR,	LT,	LV,	MK,	MX,	
	WO 2000035488 W: AL, AU, B NO, NZ, P			PL,	RO,	SG,	SI,	SK,	TR,	UA,	VN,	ZA,	AM,	ΑZ,	BY,	KG,	KZ,	
			MD,	RU,	TJ,	$^{\text{TM}}$												
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			PT,	SE														
	US	6322	770			B1		2001	1127	- 1	US 1	999-:	2812	07		1:	9990	330 <
	US	2002	0156	80		A1		2002	0207	1	US 1	999-	2812	09		1	9990	330 <

	US	6548	663			B1	2	2003	0415	US	1	1999-	2810	050		19	9990	330	<
	CA	2346	935			A1	2	2000	0622	CA	. 1	1999-	2346	5935		19	9991	217	<
	AU	2000	0237	15		A	2	2000	0703	AU	1 2	2000-	237	15		19	9991	217	<
	EP	1140	203			A2	- 2	2001	1010	EP	1	1999-	967	142		19	9991	217	<
	EP	1140	203			В1	2	2007	0523										
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			IE,	SI,	LT,	LV,	FI,	RO,	CY										
	TR	2001	0177	5		T2	- 2	2002	0722	TR	. 2	2001-	1775	9		19	9991	217	<
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	US	2003	1241	20		A1	2	2003	0703	US	1 2	2002-	2692	252		20	0021	011	<
	US	2003	1492	62		A1	- 2	2003	0807	US	1 2	2002-	3060	054		20	0021	126	<
PRAI	US	1998	-112	829P		P	1	1998	1218	<									
	US	1998	-801	50P		P	1	1998	0331	<									
	US	1998	-112	715P		P	1	1998	1218	<									
	US	1998	-112	732P		P	1	1998	1218	<									
	US	1998	-112	831P		P	1	1998	1218	<									
	US	1999	-281	050		A3	3	1999	0330	<									
	US	1999	-281	209		A3	1	1999	0330	<									
	WO	1999	-US3	0312		W	1	1999	1217	<									
OS	MAI	RPAT	133:	5909	8														

- L39 ANSWER 32 OF 44 CAPLUS COPYRIGHT 2008 ACS on STN
- TI Agent for gene therapy of tumors and neurodegenerative, cardiovascular, and autoimmune diseases
- ${\tt AB}$  A method for local/regional gene therapy of tumors (especially liver metastases)

and of neurodegenerative, cardiovascular, and autoimmune diseases comprises combined application of liposomes/plasmid DNA complexes having different compns., quantities, and concns. The pharmaceutical agent employed comprises ≥1 genetic material which are nonencapsulated or encapsulated in PEG, immuno-, immuno/PEG, or cationic, optionally polymer-modified liposomes; lyophilized or degradable starch particles and/or gelatin and/or polymer nanoparticles; and a contrast agent containing I, Gd, magnetite, or F. The genetic material preferably constitutes a suicide gene such as herpes simplex virus thymidine kinase (HSV-tk) gene, deaminase gene, or a cytokine gene coding for IL-2, IL-4, IL-6, IL-10, IL-12, or IL-15, and is enclosed in multilamellar liposomes comprising an amphiphile, a steroid, and an anionic lipid. Thus, phosphatidylcholinecholesterol-PEG liposomes containing suicide gene pUT 649, which encodes HSV-tk, were injected together with a drug carrier embolization system into the common hepatic artery of rats which had been inoculated with CC531 carcinoma cells 10 days previously. Beginning 5 days later, the rats were treated with ganciclovir (100 mg/kg/day i.p.) for 14 days. The rats showed a decrease in liver metastases after 30 days owing to conversion of ganciclovir by HSV-tk to a nucleotide-like compound which was incorporated into the DNA of dividing liver cells, causing cessation of DNA synthesis.

AN 1999:404862 CAPLUS <<LOGINID::20080311>>

- DN 131:39728
- I Agent for gene therapy of tumors and neurodegenerative, cardiovascular, and autoimmune diseases
- IN Reszka, Regina; Berndt, Antje
- PA Max-Delbrueck-Centrum fuer Molekulare Medizin, Germany
- SO PCT Int. Appl., 28 pp. CODEN: PIXXD2
- DT Patent
- LA German

PATENT NO. KIND DATE APPLICATION NO. DATE				
	PATENT NO.	KIND	APPLICATION NO.	DATE

PI	WO	9930741	A2	19990624	WO 1998-DE3763	19981214 <
	WO	9930741	A3	19990819		
		W: JP, US				
		RW: AT, BE, CH,	CY,	DE, DK, ES,	FI, FR, GB, GR, IE, IT	, LU, MC, NL,
		PT, SE				
	DE	19859526	A1	19990819	DE 1998-19859526	19981214 <
	EP	1037670	A2	20000927	EP 1998-966568	19981214 <
	EP	1037670	B1	20031105		
		R: AT, BE, CH,	DE,	DK, FR, GB,	IT, LI, NL, SE, FI	
	JP	2002508337	T	20020319	JP 2000-538719	19981214 <
	ΑT	253379	T	20031115	AT 1998-966568	19981214 <
PRAI	DE	1997-19756309	A	19971212	<	
	WO	1998-DE3763	W	19981214	<	

L39 ANSWER 42 OF 44 CAPLUS COPYRIGHT 2008 ACS on STN

TI Method for treating diseases mediated by cellular proliferation in

response to PDGF, EGF, FGF and VEGF

AB There is disclosed a method for: (1) inhibiting new blood vessel formation that is useful for treating or preventing progression of diabetic retinopathy, cavernous hemangiomas, Kaposi's sarcoma, tumors composed of endothelial-like cells, and growth of solid tumors by preventing their development of a new blood supply; (2) suppressing development of kidney diseases due to cytokine induced proliferation of mesangial cells and/or glomerular epithelial cells that is useful for treating or preventing progression of diabetic glomerulosclerosis and other glomerulonephritides of various types and etiologies; (3) preventing joint destruction accompanying rheumatoid arthritis due to proliferation of synovial cells; (4) suppressing manifestations of psoriasis due to proliferation of keratinocytes and accumulation of inflammatory cells; (5) suppressing accelerated atherogenesis involved in restenosis of coronary vessels or other arterial vessels following angioplasty; (6) suppressing atherogenesis, coronary artery disease and other vasculopathies due to atherogenesis; and (7) suppressing tumor growth via paracrine or autocrine mediated responses to PDGF, FGF, EGF, or VEGF. This is useful for treating or preventing progression of tumors such as breast cancer stimulated through overexpression of her-2-neu receptor, wherein the inventive method comprises administering a compound that inhibits signal transduction through cellular accumulation of phosphatidic acid having predominantly linoleate and a C22 alkyl or alkenyl in the sn-2 position or a vinyl ether alkenyl group in the sn-1 position.

AN 1995:804532 CAPLUS <<LOGINID::20080311>>

DN 123:276007

ΤI Method for treating diseases mediated by cellular proliferation in response to PDGF, EGF, FGF and VEGF

IN Brown, Paul A.; Bursten, Stuart L.; Rice, Glenn C.; Singer, Jack W.

PΑ Cell Therapeutics, Inc., USA

SO PCT Int. Appl., 58 pp.

CODEN: PIXXD2

DT Patent LA English

FAN.CNT 1

	PA:	PATENT NO.				KIN	)	DATE		API	PLICAT	ION	NO.		D2	ATE		
							-											
PI	WO	9519	171			A1		1995	0720	WO	1995-	US52	0		19	950:	113	<
		W: AU, CA,			JP													
		RW: AT, BE, C			CH,	DE,	DK	, ES,	FR,	GB, G	R, IE,	IT,	LU,	MC,	NL,	PT,	SE	
	CA	2192	470			A1		1995	0720	CA	1995-	2192	470		19	950:	113	<
	AU	9518	313			A		1995	0801	AU	1995-	1831	3		19	950	113	<
	EP	7392	03			A1		1996	1030	EP	1995-	9100	88		19	950	113	<
		R:	AT,	DE,	ES,	FR,	GB	, IE,	IT									
	US	5795	898			A		1998	0818	US	1995-	4853	25		19	950	507	<

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PRAI	US 1994-181947	A	19940114	<			
	WO 1995-US520	W	19950113	<			
OS	MARPAT 123:276007						

- L39 ANSWER 43 OF 44 CAPLUS COPYRIGHT 2008 ACS on STN
- II Interdigitation-fusion liposomes containing arachidonic acid metabolites
- AB An interdigitation-fusion liposome comprises an arachidonic acid metabolite, e.g. a prostaglandin, a lipid bilayer comprising a lipid, and an aqueous compartment comprising a release-inhibiting buffer. The liposomal formulations can be used to treat animals, particularly humans, for diseases, disorders or conditions which can be ameliorated by prostaglandins, e.g. cell activation/adhesion disorders and inflammatory disorders. A solution of Immy/mE/DEI was combined with a solution of dipalmitoylphosphatidylcholine at a weight ratio of PGEI:lipid = 1:20, then the solvent evaporated The dried mixture was then rehydrated with an aqueous

solution of 50mM citrate buffer to form a suspension of multilamellar liposomes.

- AN 1995:780419 CAPLUS <<LOGINID::20080311>>
- DN 123:179480
- II Interdigitation-fusion liposomes containing arachidonic acid metabolites
- IN Janoff, Andrew S.; Minchey, Sharma R.
- PA Liposome Co., Inc., USA SO PCT Int. Appl., 34 pp.
- CODEN: PIXXD2
- DT Patent
- LA English
- FAN.CNT 5

PAN.	PATENT NO.	KIND DATE	APPLICATION NO.	DATE		
PI	WO 9513797 W: AU, CA, F		WO 1994-US13063	19941115 <		
			GB, GR, IE, IT, LU, MC,	NL. PT. SE		
			CA 1994-2175350			
	AU 9510555	A 19950606	AU 1995-10555	19941115 <		
	AU 681469	B2 19970828				
	EP 729352	A1 19960904	EP 1995-901236	19941115 <		
	EP 729352	B1 19990203				
			GB, GR, IE, IT, LI, LU,			
	JP 09505302	T 19970527	JP 1995-514532	19941115 <		
		B2 20060719				
	AT 176397		AT 1995-901236			
	ES 2126868		ES 1995-901236	19941115 <		
	NO 9601949	A 19960513		19960513 <		
	NO 312808					
	FI 9602080		FI 1996-2080	19960515 <		
PRAI	US 1993-153176					
	WO 1994-US13063	W 19941115	<			

- L39 ANSWER 44 OF 44 CAPLUS COPYRIGHT 2008 ACS on STN
  - I Inhibition of proliferation of vascular smooth muscle cells by antisense oligonucleotides against cyclins and cyclin-dependent kinases
- AB This invention encompasses a method for inhibiting vascular cellular activity of cells associated with vascular lesion formation in mammals which involves administering an effective dosage of at least one antisense sequence to at least one gene expressing a cyclin or a cyclin-dependent kinase. More particularly, the invention involves administering antisense sequences which inhibit the expression of cyclin A, B1, B2, C, D1, D2, D3, E or cyclin X(p46) and cyclin-dependent kinases cdc2, cdk2, cdk4 or cdk5. It is preferable to use 2 antisense sequences each from a different cyclin

or cyclin-dependent kinase. The cyclin or cyclin-dependent kinase dosage is preferably administered in combination with proliferating cell nuclear antigen (PCNA). Antisense methods and compns. directed toward inhibiting the expression of growth factors such as TGF-B1, TGF, bFGF, PDGF are also provided. The antisense sequences are incorporated into liposomes, particularly liposomes containing HVJ (hemagglutinating virus of Japan) and are directly administered intraluminally, intramurally, or periadventiously. The methods of this invention are useful in treating a broad spectrum of vascular lesions such as lesions in the carotid, femural, and renal arteries, and particularly lesions resulting from renal dialysis fistulas. The invention is particularly useful in treating vascular lesions associated with coronary artery angioplasty.

AN 1995:380320 CAPLUS <<LOGINID::20080311>>

DN 122:151381
Inhibition of proliferation of vascular smooth muscle cells by antisense oligonucleotides against cyclins and cyclin-dependent kinases

IN Dzau, Victor J.

PA Board of Trustees of the Leland Stanford Junior University, USA SO PCT Int. Appl., 76 pp.

CODEN: PIXXD2

DT Patent

LA	Eng	lish
FAN.	CNT	4

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		PATENT NO.			KIND	)	DATE		AF	PLICAT	ON NO.		D.	ATE				
E	PΙ	WO	9426888			A1		1994	1124	WC	1994-	US5566		1	99405	518	<	
			W: CA,	JP														
			RW: AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB, C	GR, IE,	IT, LU	, MC,	NL,	PT,	SE		
		US	5821234			A		1998	1013	US	1993-	110294		1	99308	820	<	
		EΡ	701609			A1				EP 1994-919161								
			R: AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB, C	GR, IE,	IT, LI	, LU,	MC,	NL,	PT,	SE	
		JP 09507381 I US 1993-63980			T		1997	0729	JE	1994-	525809		1	99405	518	<		
Ε	RAI				A		1993	0519	<									
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		US	1992-944	882		B2		1992	0910	<								
		WO	1994-US5	566		W		1994	0518	<								